

# LEATH & ROSS,

THE OLD-ESTABLISHED

## HOMŒOPATHIC CHEMISTS,

Continue to supply their well-known brand of

## HOMŒOPATHIC MEDICINES

To all parts of the civilised world on the most advantageous terms.

SEND FOR ORDER FORMS AND PRICE LIST.

## PILULES & TINCTURES,

Put up in 1s. Bottles, ready for sale, 3s. 9d. per Dozen, in neat Cardboard Cases, done up in outers containing  $\frac{1}{2}$  dozen and 1 dozen in each.

PROPRIETARY ARTICLES COMMANDING A LARGE SALE:—

### GLYKALINE, NEURALINE,

THE CURE FOR

Catarrhs, Hay Fever, and Colds.

LEATH & ROSS'S GLYKALINE is now admitted to be the best and speediest cure for Catarrhs, Influenza, and Bronchitis. Taken at intervals of one hour, these diseases vanish like magic, and leave no trace behind by which to remember them. Try it! In Bottles, 1s. 3d., free by Post. 40,000 have been sold.

THE CURE FOR

Neuralgia, Faceache, or Tic-Doloureux

LEATH & ROSS'S NEURALINE is now a well-known and acknowledged cure for the above complaints; scarcely ever fails to afford relief in a few moments from the most maddening pains. Should be in every household, and used at the earliest moment. In Bottles, 1s. 3d., free by Post. 52,000 have been sold.

### PHOSPHO-MURIATE OF QUININE.

THE SPECIFIC FOR

DEBILITY, EXHAUSTION, & NERVOUSNESS.

Gives tone and energy to body and mind. In Bottles, 1s. 1½d. and 2s. 9d. each.

## CHENOPODIUM WORM POWDERS

Still maintain their great popularity. In Boxes, 1s. 9d. and 2s. 9d. each. Orders coming in for them from all parts of the world, in quantities from 200 to 400 at a time.

Indentors should always include these four celebrated preparations in their indents. The first three, in gross quantities, 8s. 6d. per dozen net; the fourth, in any quantity, at 13s. 6d. and 19s. 10d. per dozen net.

SPECIAL QUOTATIONS TO LARGE BUYERS AND TO SHIPPERS.

# LEATH & ROSS,

9 Vere Street, W., and 5 St. Paul's Churchyard, E.C.,  
**LONDON.**

# OUR IDEAS.

ARMBRECHT, NELSON & CO., to the Trade *re* **COCA WINE.**

WE propose to do a larger volume of business in 1892 than we did in 1891. At least, we are preparing for an advance. In **March next** we shall remove into our new premises erected to **OUR IDEAS**, at Duke Street, Grosvenor Square, London, W. There is a sketch of the exterior of these premises on page 43 of "The Chemists' and Druggists' Diary, 1892." Will you refer to it, please? It is a substantial building, you see. We are fitting it internally in a very complete fashion. All that Art and Science can do to facilitate labour, to expedite and improve manufacture, and to conduct our business in a business-like way, we are endeavouring to introduce. So much in regard to ourselves.

## ANOTHER IDEA

Armbrecht's Coca Wine is a very popular proprietary. Our **Happy Medium**, like the golden mean in everything, has gained the day. Sales have increased so much that while 2 lbs. of Coca leaves formed our first order, and we bought by the half-ton in Spring of 1891, by the Autumn we were buying in 3-ton lots, all of which means that **ARMBRECHT'S COCA WINE** is an article that sells freely. Is it not wise to stock it? It yields a profit of at least 12/- a dozen.

We shall do our best by liberal advertising to make them sell, and when there is an unusual demand, send us a telegram, or wire to your favourite wholesale house.

2, 3, & 4 Duke Street,  
Grosvenor Square, London, W.

### THE HAPPY MEDIUM

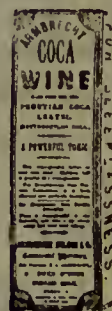
This is made with a superior wine, possessing the bouquet of port, but free from its astringency. In some respects it has the hæmâtine properties of claret. Retail price, 48/- per doz., wholesale 36/. Carriage paid to any town in England and Wales, half to Scotland and Ireland.

The Wine is a remedy for fatigue of mind and body. Patients find it advantageous to take a small wine-glassful of it daily a 12 and 4, with a biscuit, or at the two principal meals of the day. Consequently, it is desirable that they should take a course of it, and we ask the co-operation of the trade in advising customers to buy it in half-dozen cases (assorted). We send the wine out in this way carefully packed; it keeps indefinitely, and cannot be shopworn. A few of these cases should be kept in

COCA WINE  
(ARMBRECHT'S)

### ORDER SHEET.

Gentlemen,  
Please to send immediately, on receipt of this by \_\_\_\_\_ 18. \_\_\_\_\_



Doz. Coca Medium	...	...	retail price 48/- doz.
" Coca Burgundy	...	...	48/- "
" Coca Malaga	...	...	48/- "
" Coca Port	...	...	48/- "
" Coca Sherry	...	...	48/- "
" Coca Champagne	...	...	48/- "
" " " " " "	...	...	Quarts, retail price 56/- "
" Coca Wine Extract	...	...	Pints, " 33/- "
" " " " " "	...	...	Bottles, " 42/- "
" Coca Lozenges	...	...	" " 66/- "
" " " " " "	...	...	Box, retail price 18/- "
" " " " " "	...	...	Tin, " 30/- "
PAMPHLETS FOR DISTRIBUTION—NO CHARGE.			

L.	s.	d.

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Grosvenor Square, W.

To ensure prompt delivery Cheque must be enclosed with each order

Respectfully,

**ARMBRECHT, NELSON & CO.**



# Winter Wants.

Another Season's trade is approaching. Already there are indications of a rigorous winter. The mornings are raw and cold, evenings chilly, and winds biting. None know so well as Chemists and Druggists the intimate relation between the barometer and health. Bad weather means various things; some of them we give quotations for on this page, with this brief hint: We are in the best position in the world for supplying the best goods, at the best prices, and on the best terms. We employ no Travellers, and give our Customers the advantage of the saving in expenses.

## NEW CHEST PROTECTORS.

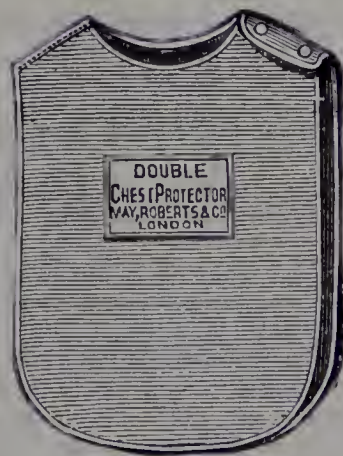
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BEST QUALITY. BOUND WITH SILK.



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Per doz 4/9 6/ 7/9 9/3 11/

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Price List.



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Nos. 1 2 3 4  
Size—11 x 8 12 x 9½ 13½ x 11½ 16½ x 14 in.  
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Oval, in Tin, 5/8 and 6/3. Cheaper kinds, 1/10 and 2/4.

HOT-WATER



BOTTLES.

3/7 to 8/ each.  
Scarlet covers, 1/ to 2/ extra.



Plain White, 1/9.  
Marbled... 2/-.



**SALEABLE SPECIALITIES**, put up ready for retailing; quality of material in all cases excellent, and style of putting-up elegant.

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In 1-doz. glass-top boxes, 3d., 1/6; 6d., 3s. per dozen.

**GLYCERINE JELLY**—M. R. & Co.'s 6d. bottles, 2/6 per dozen.

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Each stick in gold paper case, 1/9 per dozen box.

1d. squares, neatly wrapped, 2/6 per gross.

4-oz. sheets, 3/.

**INHALERS**—Coghill's, Mackenzie's, Godfrey's, and other Ammonia Chloride Inhalers, at lowest prices.

**LIP SALVE**—Rose or White, in push-up cases, in 1-doz. glass-top outers, 2/2 per dozen.

**PLASTERS** of all kinds, on paper, calico, swansdown, leather, &c., porous or otherwise. See Price List, pp. 46-47.

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AT SPECIAL TERMS FOR CASH.

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Dealers in Patent Medicines, Proprietary Articles, Perfumery, Mineral Waters, Lozenges, &c., &c.,

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                  { Mr. CHAS. TURNER, F.C.S., } *Chemists.*

The undersigned students from the M.C.P. passed at the October Examinations, several being complimented both in practice and in theory:—

### MAJOR.

Mr. J. B. Broadbent, Honley.      Mr. A. Wilson, Grimsby.

### MINOR.

Mr. L. Blakeley, Otley	Mr. T. H. Bradley, Manchester
" H. O. Dyson, Huddersfield	" A. Enoch, Manchester
" J. G. J. Goddard, Manchester	" J. Horne, Pendleton
" J. H. Wakefield, Manchester	" J. L. Ward, Leeds

The next Session will begin on Jan. 4th; all particulars are given in the Copyright Prospectus, which will be sent to any address free on application

## SHEFFIELD COLLEGE OF PHARMACY, 118 THE MOOR, SHEFFIELD.

*Principals:* { Mr. R. B. GREAVES, Ph.C., F.C.S.  
                  { Mr. J. W. J. TURNER.

At the recent Minor Examinations THREE Students were sent in—  
ALL passed at FIRST attempt from here:—  
Messrs. Flemons, Dimbleby, and Houston.

The Classes for the February and April Examinations  
commence MONDAY, JANUARY 4, 1892.

The Principals will be pleased to give any particulars as to classes,  
fees, &c. Prospectus on application.

## ROYAL (DICK) VETERINARY COLLEGE, CLYDE STREET, EDINBURGH.

The SECOND TERM of the SIXTY-NINTH SESSION  
OPENS on JANUARY 4th, 1892. The College has recently  
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provided for the teaching of 250 Students.

Prospectus and full particulars on application to Principal  
WALLEY.

## LONDON HOMOEOPATHIC HOSPITAL AND MEDICAL SCHOOL, GREAT ORMOND STREET, BLOOMSBURY, W.C.

*President*—THE LORD EAURY. *Chairman*—MAJOR WM. VAUGHAN MORGAN.  
Contains 90 Beds, and being entirely supported by Voluntary Contributions, Donations and Annual Subscriptions are earnestly solicited. The Hospital is always open to the inspection of visitors, and Clinical Instruction is given in the Wards and Out-patient Department to Medical Students and Practitioners. It possesses a valuable Library of Homoeopathic Publications, which Medical Men are invited to study. They are also invited to visit the Dispensary. The In-patients number over 700 annually; the Out-patients nearly 9,000 annually. The number of Patients treated since the inauguration in 1849 exceeds 215,000. It has a staff of 2 Nurses for Ward Nursing and Nursing Invalids at their residences.

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ANTI-DRINK PILLS—Answer splendidly—positive proofs.

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invariably brings on desired result.

GLYCERINE CREAM—Perfection of Winter Toilet requisites, elegant  
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GLYCERINE & LICORICE BALM—Best all-round Cough Mixture ever  
offered. 2-oz. Bottles cost 3s. doz.; pleasant taste and nice appearance.

Above 6 Recipes, with full directions, post free 2/6.

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Classes will be commenced on

TUESDAY, JANUARY 5, 1892.

*Students desirous of entering should send in their names  
as early as possible.*

Prospectus of 76 pages, giving full particulars of College  
Fees, Evening Classes, Courses of Instruction, and the  
Regulations of the Board of Examiners, POST FREE on  
application.

At the Pharmaceutical Examinations held in London last  
month (October), the following Students of this College  
were successful:—

Mr. T. A. Butterfield, Keighley	Mr. D. T. Neal, Waddon
" S. E. Bisle, London	" G. E. Norrish, Exeter
" A. J. Ferriday, Hertford	" R. P. Page, London
" J. S. Gallimore, Tintbury	" L. B. Pragnell, London.
" E. Haynes, Oxford	" G. J. Roberts, Deptford
" H. D. Jones, Newcastle Emlyn	" T. H. Seed, London
" E. H. Lambert, Bradford	" W. Thorley, London
" H. T. Maundrell, London	" A. E. White, Ashford
" A. Moore, Birmingham	" R. H. Williams, Holyhead

° Passed in Edinburgh.

In addition to the above gentlemen who attended the  
Lectures and Classes in College, several postal students were  
successful in passing whose names we do not publish, but  
may be had on application to the Principals,

WILLS & WOOTTON.

## FINEST CRUSHED LINSEED.

£15 per ton, 17s. per cwt., 9s. per 56 lbs.,  
in bags; 27s. for 36 2-lb. Tins; carriage paid  
within 200 miles.

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PURVEYORS TO HER MAJESTY,

HEADLEY OIL MILLS, GREENWICH.

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INCREASE your INCOME

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## INDIARUBBER STAMPS.

Best and Cheapest. Orders executed in one day.

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YE "OLDE LUDGATE" WORKS,

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(ILLUSTRATED)

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THE CHEAPEST.  
THE LARGEST.  
THE BEST.

Compiled expressly for Chemists' distribution, and highly commended by their Customers.

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With Chemists (who have adopted Year Book) and their Customers' opinions.

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IN RUBY, BLUE, AMBER, AND OPAL GLASS.

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WINTER SEASON, 1891-92.

# FAMILY REFERENCE ALMANACK, 1892.

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Kay's New Transparent Cement for Broken Articles.

"Clear as Crystal," "Stronger than Glass," "Tough as Leather," 6d., 1s., 2s., in Boxes, or on Cards. Show-cards, Handbills, with name, &c. Specimens, &c., for home, or export, free.

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Essence of Linseed, Aniseed, Senega, Squill, Tolu, &c.  
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"FAME" contains articles by eminent advertisers. "Art in Advertising" by Thomas J. Barrett (A. & F. Peare) in November number, just published.

"FAME" Sketches, criticisms, notable advertising; latest notes on all matters relating to the advertising of proprietary articles.

"FAME" advises on Trade Mark matters, having appointed an eminent legal specialist and expert for that purpose. Monthly articles on current Trade Mark law.

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To Chemists who combine a SEED TRADE with their other business, we can supply them with every requisite suitable for that business, as we are The Largest Makers of SEED POCKETS in the KINGDOM.

Special attention is paid to Printing SEED CATALOGUES, Samples of which will be ready in November, and sent free on application.

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Including SPERMATORRHOEA, PROSTATORRHOEA, IMPOTENCE, and STERILITY in Both Sexes.

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Formerly, a neutral Soap was hardly to be found in the market; but after we introduced a neutral soap the manufacturers of various soaps immediately claimed that theirs were neutral. We have now introduced a first-class Soap, retailing at 4d., **that is within the reach of all.** Heretofore our products have been manufactured without regard to expense, and therefore had to be sold at a price which placed them beyond the means of the million. **PREMIER "VINOLIA" SOAP** is perhaps the most noteworthy of all our products, inasmuch as, while it is a thoroughly first-class article, it is not expensive.

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1. It does not contain 20 or 30 per cent. of sugar, like transparent soaps, so that when one buys it he does not pay for soap and get soap and sugar.
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This Section of "The Chemist and Druggist" must be closed for press by Wednesday morning's post of each week. Remittances payable to EDWARD HALSE.

## TERMS.

Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of  $\frac{1}{2}$ d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C., and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

**DEPOSIT OF MONEY.**—In order to ensure safety we offer the following system:—The purchaser of anything advertised in the Exchange Column may remit the amount to us, accompanied by a commission of 6d. if the amount is £3 or under; and 1s. if over that sum. We acknowledge receipt of deposit to both parties, and hold the money until we are satisfied that either the goods are returned to their original owner or the purchase is completed.

Postal orders and cheques sent as deposit must be made payable to Edward Halse, and crossed "Martin's Bank (Limited)."

## FOR DISPOSAL.

### Literature.

Will post *Photography and Amateur Photographer* weekly in exchange for *The Chemist and Druggist*. Pike, Hinckley Road, Leicester.

### Educational.

For sale.—Cassall's "Family Physician," 2nd edition, complete, in good order, cost 21s.; what offer? Norman, Chemist, Bedford.

### Formulæ.

Genuine recipes.—Carbolic sheep-dip, arsenical dip, butter-colouring, 3s. 6d. each. 65/40.

Chillblain-lotion, toothache-essence, harbers' itch; all reliable; 2s. each. Turner, 116 Oxford Street, Leicester.

### Proprietary Articles.

Dohson's black-leg drinks; one-third retail price. 97/20.

Soiled patents, cheap. List on application to J. B. Walker, Chemist, South Shields.

Great Sacrifice.—Moonseed Bitters, Pills, Ointment, all sizes, at half retail prices; new stock, perfectly clean; cash with order. Adam, Chemist, Pigott Street, Birmingham.

### Shop Fittings.

Two nests mahogany drawers, 6 feet; cheap. Skewes, 2 Upper Street, Islington.

Two gold-label show window-jars, new; bargain. 14 All Saints' Road, Notting Hill.

Two small nests drawers, deal, enamelled fronts, 1s. per drawer; large desk, mahogany top, lock and key, 12s. Walden, Ramsey, Man.

Mahogany dispensing-screen, suit good shop, 60 by 27 $\frac{1}{2}$ . Marston, Chemist, Dulwich.

Neat polished oak case, with wording in human teeth on black velvet, "Teeth Extracted": price 10s. 6d. Livesey, Medical Hall, Ashton-under-Lyne.

Job line.—1,000 new ointment-jars, blue canopy covers, &c., at the following low prices:  $\frac{1}{2}$ -lb., 3s.;  $\frac{1}{4}$ -lb., 6s.; 1-lb., 9s.; 2-lb., 12s.; 4-lb., 15s. doz. Also 500 blue syrups, plug stoppers: 20-oz., 7s. 6d.; 30-oz., 9s.; 40-oz., 12s. doz. Natali, 184 Aldersgate St., London.

Drawers, mahogany, 12 ft. run, with shelves, lockers, cornice, and pilasters, second-hand, 151; glass-fronted counter to match, 10 guineas; dispensing-screen, mirror centre, 7 ft. long, 71. 10s.; sponge-case, counter-essence, bottles, carbays, and entire fittings of a first-class shop, in good condition, for sale, together or separate. Philip Josephs, 54 Old Street, Goswell Road, London, E.C.

### Miscellaneous.

Sound garlic, 4d. small lots, less per cwt. R. C. Mason, Bromsgrove.

Cheap.—Higginson's enema syringes, brass-mounted do., for cash or exchange. Orchard, Salisbury.

Gasometer, large, 50s.; vulcaniser, large, new, 55s. "Gas," 1 Carisbrook Terrace, Blackheath, S.E.

Henry Lawrence's spectacles and eye-glasses, invoiced last year at 201; will accept 41. or what offers? 104/9.

Pinder's rotary pill-machine and piping-press, for 4 or 5 grain pills; price 61. 10s. Whales, 41 London Road, Southwark.

Secondhand fittings—Counter, wall-case, mahogany drawers, dispensing-screen: also, one share in Chemists' Mineral Waters Association (25/-). Postmaster, St. George's Road, Hastings.

Surplus stock.—Good hops, 5d. lb., bargain; also sundries; cheap, or exchange patents. Fresson, Hope Street, Hanley.

Copper steam-jacketed evaporating-pan, 7 feet diameter; copper still, 100 gallons, heated by gas. Bennett, Sons & Shears, 167 Kingsland Road, N.E.

Two specie-jars (requiring new designs); height, with mahogany stand, 24 inches; Dinneford's flesh-gloves (six pairs), ladies' and gents', 5s., Nos. 1 and 2; will sell cheap, or exchange for or buy S. N. telegraph instrument, or exchange for suitable goods; what offers? McGibbon, Wash-on-Dearne.

## WANTED.

Mahogany wall-cases. Deacon & Co., Beckenham, Kent.

Shop-fixtures, bottles, and utensils for branch. Price, Ahertillery.

Steedman's, Beecham's, Warner's, Cockle's, and others; cash or exchange. 107/16.

Quain's "Dictionary of Medicine," last edition, good condition; state lowest price. R., 2 Queen Street, Exeter.

Oblong and round window show stands—bronzed metal and plate-glass. Fearon Brown, Cuckermouth.

Ergot. Send sample, price, and weight, to John Moss & Co., Galen Works, Wilson Street, New Cross Road, S.E.

Moonseed Bitters, with "Caution" slip on back of each bottle. Duck & Son, Chemists, Cardiff.

Parnall's or Tupholm's patent paraffin-pump, in good condition. Rayson, Chemist, Nottingham.

Muter's "Medical and Pharmaceutical Chemistry" (theoretical and descriptive). Brown, 265 Glossop Road, Sheffield.

Offers for half-gallon Wright's liq. carbonis detergens, 2 lbs. pulv. ext. coloc. co., 10 lbs. gum copal, morrhue capsules, pumiline essence. Furness, Chemist, Accrington.

# BOOKS FOR THE CHEMIST'S LIBRARY.

"THE ART OF DISPENSING." Price 3s. 6d. By post, 3s. 10d.

"HANDY BOOK OF MEDICINE-STAMP DUTY." By E. N. ALPE, of the Solicitor's Department, Somerset House. Price 2s. 6d. By post, 2s. 9d.

"MANUAL OF PHARMACEUTICAL TESTING." By B. S. PROCTOR, F.I.C. Price 2s. 6d. By post, 2s. 9d.

"VETERINARY COUNTER PRACTICE." Price 3s. 6d. Post Free, 3s. 9d.

Published at the Offices of THE CHEMIST AND DRUGGIST, 42 Cannon Street, London, E.C.; and from all Wholesale Houses.



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HAVE REMOVED THEIR CITY ADDRESS TO

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Where all orders and communications should be addressed.

Their New Factory at Camden Town is nearly complete, and is being fitted with new and improved appliances for turning out the most



## PERFECT MEAT PREPARATIONS FOR INVALIDS.

# IDRIS & CO.

Purveyors

of

Table

Waters



By Royal  
Warrant of  
Appointment  
to Her Majesty  
the Queen.

**IDRIS & CO.** now supply a larger number of the London Hospitals, Public Institutions, and Chemists than any other Manufacturers, which is in itself a sufficient guarantee of the excellence and purity of the Waters supplied by them.

"I have examined the Mineral Waters prepared by IDRIS & CO., and find that in regard to Chemical Purity and Brilliancy they are unsurpassable."

JAMES EDMUNDS, M.D., M.R.C.P., London, &c.  
Medical Officer of Health and Public Analyst to St. James's, London

## IDRIS TABLE WATERS IN SYPHONS & BOTTLES.

ELEGANT SYPHONS. BEST PRICES. PROMPT DELIVERY. WRITE FOR PRICE LIST.

**IDRIS & CO., KENTISH TOWN, LONDON, N.W.**



# SYPHONS & SELTZOGENES



## SODAWATER MACHINERY

AND APPLIANCES

## BRATBY & HINCHLIFFE LTD

ANCOATS & 146 MINORIES

## MANCHESTER & LONDON EC

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All our Seltzogenes are manufactured on the well-known "Fevre" System, and each one is thoroughly tested before leaving the works.



### PRICES.

SYPHONS — 1/6 1/8 and 1/10 each.

### SELTZOGENES.

	2	3	4	5	8 pint.
5/6	6/2	7/	8/	9/11	15/6 each.

# CARLSBAD NATURAL MINERAL WATERS & SALTS.

Are imported in bottles, and used in the treatment of CHRONIC GASTRIC CATARRH, HYPERÆMIA of the LIVER, GALLSTONES, CHRONIC CONSTIPATION, DIABETES, RENAL CALCULI, GOUT, and DISEASES of the SPLEEN.



## NATURAL

## CARLSBAD SPRUDEL-SALT

In small and frequent doses it is an efficient *diuretic*, but as an *aperient* it should be taken *before breakfast*, in doses of from 1 to 2 teaspoonfuls, dissolved in water, preferably warm. To increase the *aperient* action of the Natural Carlsbad Mineral Water, a teaspoonful of the Salt, previously dissolved in a little hot water, should be added.

SOLE IMPORTERS—

[1]

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London: 52 Farringdon St., E.C. Liverpool: 19 South John St.  
(AND OF ALL CHEMISTS).

Price List of all Natural Mineral Waters on application.



# PHOSPHO-CITRIC ACID

Is the only **PURE**  
acidifying principle that  
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to the Mineral Water  
Trade.

Price 10d. per lb. Write for Sample.

Read the following unsolicited  
Testimonial.

**HASSALL & CO.**  
King's Cross,  
**LONDON.**



**GOLD**  
AWARDED AT THE INTERNATIONAL FOOD AND HEALTH EXHIBITION, LONDON, 1890,  
**FOR PURITY AND EXCELLENCE.**

We have now discarded Citric,  
and you are at liberty to make  
use of this if you think proper.

Yours faithfully,  
**THOMAS MAYO & CO.**

AVOID TRADE APES AND THEIR WORTHLESS IMITATIONS.

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Oxford Street,  
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**Messrs. HASSALL & CO.**

Gentlemen,—

Kindly forward  
another 18-Gallon  
Cask of Phospho-  
Citric Acid. We con-  
gratulate you on your  
recent improvement,

for samples of our Waters  
were sent to one of the  
first Hospitals in the West  
End made from yours and  
Citric Acids, and yours was  
chosen as the purest and best.



# JEWSBURY & BROWN'S (MANCHESTER) SPARKLING TABLE WATERS. UNRIVALLED FOR PURITY AND QUALITY.

**SODA WATER.**  
**SELTZER WATER.**  
**POTASH WATER.**  
**LITHIA WATER.**  
**SIMPLE  
AERATED WATER.**



**LEMONADE.**  
**GINGER ALE.**  
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**GINGER BEER.**  
**HOREHOUND BEER**

## EXTRACTS FROM ANALYTICAL REPORTS.

The examination of the Waters which I have made has satisfied me that they have been prepared with the greatest care, and are of excellent quality."

FRANCIS JONES, F.R.S.E., F.C.S.

On the whole, I have no hesitation in stating that your Aerated Waters are of the highest standard of purity which is practically attainable."

LOUIS SIEBOLD, F.I.C., F.C.S.

J. & B.'s Syphons are mounted with **PURE BLOCK TIN**, thus ensuring absolute immunity from dangerous metallic contamination

**CARRIAGE PAID AND ON RETURNS.**

**113 MARKET STREET, and 44 DOWNING STREET, MANCHESTER.**

**A WONDERFUL SUCCESS!!**

**NON-INTOXICATING BEER**

Made from MASON'S Original

## EXTRACT of HERBS

(REGISTERED.)

Composed of Yarrow, Dandelion, Comfrey, & Horehound.  
**ENLARGEMENT OF SIZE.**

A Sixpenny Bottle makes **EIGHT GALLONS** of  
**HERB OR BOTANIC BEER**

A NON-INTOXICATING BEVERAGE

Full of Body and Flavour, with a Creamy Head like Bottled Ale, the most perfect substitute for Alcoholic Drinks ever discovered, for either Summer or Winter.

**BEWARE** of mean and fraudulent imitations.

**BEWARE** of others copying our title.

**MASON'S** is the original and only genuine.

**MASON'S** is a Special Compound entirely from Herbs

NO OTHER EXTRACT MAKES BEER LIKE IT.

Sold in Bottles at 6d., 1/6, & 2/ each, with directions.

## MASON'S WINE ESSENCES

Make Temperance Wines in a few minutes.

Ginger, Orange, Lemon, Raspberry, Black Currant, &c.

These are having a very large sale now, and are extensively advertised.

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Quotations on application.

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## SOLUBLE ESSENCES

ARE GUARANTEED TO BE THE FINEST IN THE MARKET

### GINGER. HOP. LEMON & c & c

W. HAY, MANUFACTURING CHEMIST

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IN ORDERING SPECIFY HAY'S MANUFACTURE



Chemists are earnestly requested in their own interest to maintain full retail price of 1s. 6d. per bottle.

# THE "FRANZ JOSEF" Natural Aperient Water

Claims these advantages in comparison with others of that class, viz.:—

- (1) It is the **STRONGEST** in the cathartic salts; and therefore less of it is necessary to produce the desired effect.
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Of Special Value in the Treatment of **CHRONIC CONSTIPATION**,  
Lithemia, the Laxative for Ladies before and after Accouchement, Anemia, Dyspepsia, and Gastric Catarrh.



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Chemists will oblige by writing for the handsome Show Card, of which the above is a facsimile in Black and White, to—

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HIGHEST AWARD AT THE INTERNATIONAL EXHIBITION, LONDON, 1885.  
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### FRUIT SYRUPS & CORDIALS

"First-class beverages."—*The Grocer*.  
"Have an established reputation."—*Noncon-*  
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"Invigorating and refreshing."—*Manchester*  
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Price Lists, Testimonials, and other information sent post free on application to the Manufacturer—**W. BECKETT, Heywood, Manchester.**  
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Cherry, Raspberry,  
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Black Currant, Lemon,  
Orange, Jargonelle Pear,  
Pineapple,  
Raspberry Vinegar,  
Orange and Quinine.

#### HOT DRINKS.

Winterine, Honey Liqueur  
Aromatic Black Currant  
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Peppermint, Clove,  
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## "MYRTLE GROVE" TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and  $\frac{1}{4}$ ,  $\frac{1}{2}$ , 1 lb. Tins only.



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ESTABLISHED 150 YEARS.

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Write for List of Specialities.

#### TOBACCO AND CIGARS—MIXED PARCELS.

Every Requisite for the Smoker in One Order.

The following Manufacturers' Packet Tobaccos supplied at their List Prices  
**CARRIAGE PAID**—Wille, Cope, Hignett, Gallaher, Taddy, Ogden,  
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**BRITISH CIGARS** from 4s. to 20s. per 100. All carefully selected  
and well matured. The largest and most varied stock in the United  
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Irish Roll, Pigtail, Nailrod, Target, Cake, Plug, and all other hard  
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Tobacconists' Fancy Goods and Smokers' Sundries of every description  
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Carriage paid on parcels from £2 upwards to any station in the United  
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A large quantity of well-matured Orange Wine for disposal.  
Will not deposit. Buyers will find it to their advantage to  
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**200** LARGE BOTTLES of SODA,  
SELTZER, OR OTHER **1/-**  
MINERAL WATERS for

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### AERATING AND BOTTLING MACHINE.



The only Automatic  
Machine for Pumping,  
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by one person and at  
one operation.

A Complete Machine, by  
which one man is capable of  
making about 25 dozen  
bottles of Pure Aerated  
Waters per hour AT LESS  
THAN ONE SHILLING  
PER GROSS.

The Machine occupies a  
Floor-Space of only 2 feet  
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EIGHT PRIZE MEDALS AWARDED.

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## YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each

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Delicious Custards without Eggs. In Boxes, 2d., 6d., and 1s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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The unique appearance and flavour of this novelty quickly ensured a large sale, and its success, as might have been anticipated, quickly brought to the front some worthless imitations, the sale of which can only result in disappointment to all concerned.

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are the only genuine PEARL CACHOUS: they are not only better looking, but are double the strength of the imitations, and buyers are therefore requested to order the original, and thus ensure a perfect article. They are elegantly put up in attractive one-pound bottles, and are an ornament to any Pharmacy. The following flavours are always in stock—

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Price 2s. 9d. per lb. in 1-lb. bottles.

*Eight bottles sent carriage free to any part of the Kingdom.*

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MANUFACTURING PHARMACEUTICAL CHEMIST,  
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## AN ENTIRE DIET FOR INFANTS.

Supplies all the elements necessary for the complete nourishment and growth of the human frame.

Nestlé's Food, being partly composed of milk, is complete and entire in itself, and requires simply the addition of water to make it instantly ready for use. It is not merely an auxiliary, like other Infants' Foods, which require milk to be added in preparing for use.

Recommended by the highest medical authorities as the nearest equivalent to MOTHERS' MILK.

*Pamphlet, with Medical Testimonials, with sample sufficient for a fair trial, sent post free on application to*

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**NOURISHING, STRENGTHENING, AND FLESH-FORMING.**

*"Spiking's Malt Biscuits are an admirable article of dietary for use in the Nursery or Sick Room."—British Medical Journal, May 16th, 1888.*

**RECOMMENDED BY THE MEDICAL PROFESSION.**

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Bakers to Her Majesty and H.R.H. the Prince of Wales,

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AND OF ALL WHOLESALE HOUSES.



# PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25 % of Allen & Hanburys' Extract of Malt.

**A NOVEL CONFECTION.**

*Delicious Flavour. Brilliant & Attractive Appearance.*  
**SELLS AT SIGHT.**

*Vide Dr. Tanner's Report, and The Chemist and Druggist, April 20th.*

1/- Bottles, 9/- per dozen; 1-lb. Bottles, 18/- per dozen;  
and in 2-lb. and 4-lb. Bottles, 1/4 per lb.

**HANDBILLS POST FREE ON APPLICATION.**

OF ALL WHOLESALE HOUSES, OR OF THE MANUFACTURER, <sup>[1]</sup>

**JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.**

# THOS. GUEST & CO.,

**City Works, Carruthers St., MANCHESTER.**

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**HOME AND EXPORT.**

**MANUFACTURERS FOR WHOLESALE DEALERS,**

**Also for Chemists requiring High-Class Goods at Reasonable Prices.**



**AGENTS APPOINTED**

FOR SALE OF

**DR. ALLINSON'S  
NATURAL FOOD.**

The MOST DELICIOUS and LEAST COSTLY, for

**BABIES, CHILDREN (any age), INVALIDS, AND ADULTS.**

The INVENTION of

**DR. T. R. ALLINSON, L.R.C.P.,***The Eminent Hygienic Physician, and Authority on Health and Diet, and each Packet bears his Autograph.**This FOOD is not highly spiced, or chemically prepared, but***A PURE and NATURAL FOOD.**

PACKETS, 1d., 3d., 6d., 1s. EACH.

*Write for Samples and Prices to*

[1]

**THE NATURAL FOOD COMPANY,**

PETER TYRER, Proprietor,

South Street, Bermondsey, LONDON, S.E.

**PETER TYRER'S  
MENTHOL**GOOD  
VALUEGOOD  
VALUE

FIG. A.

FIG. B.

REVERSIBLE.

BOTTLE.

VASE.

PEDESTAL.

**TYRER'S SPECIAL 1d. BOTTLE at 56.**

1d. { Assorted, Bottle, Pedestal, and Reversible or Vase. } 6/- gross. | 2d. { Fig. A., Stained, and Fig. B., Varnished } 12/- gross. | 3d. { Fig. C., Barrel, Polished Willow, and Fig. F., Draughtsman, Stained and Varnished } 18/- gross.

1d. and 2d. on 1/2 gross beautiful Show Cards, WITH ELASTIC. [4]

For sums under £1 please remit Postal Order, not CHEQUE, and oblige. All Goods free to Rail or Docks in London, for Cash against Invoice.

**SAMPLES OF ANY POST FREE ON RECEIPT OF BUSINESS CARD.****PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.**

Also through W. & C. Pantin, Burgoyne & Co., Jos. Travers & Sons, Evans, Sons & Co., Droltwich Salt Co., Geo. Startin, Henderson & Liddell, Hovenden, Newbery, Barclay, Banger, May Roberts, Hearon Equire, Sutton, Edwards, and all Wholesale Houses.



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## "DESICCATED SOUP."

The above is the Registered Trade Mark, No. 87,133, of FREDERICK KING & COMPANY (Lim.), of 3, 4, 5, and 6 Camomile Street, London, and Belfast.

Chemists, Dealers, and others are warned against infringing the rights of the owners, and against dealing in goods not of Frederick King & Company's Manufacture, having thereon the said Registered Trade Mark.

Proceedings with a view of enforcing the Company's rights are now pending, and further proceedings will be taken, and penalties enforced against all persons and firms infringing the rights of the Company.

Dated October 8, 1891.

**J. H. JOHNSON, SON, & ELLIS,**

Solicitors for the Company.

47 LINCOLN'S INN FIELDS.

## THE BERKEFELD - NORDTMEYER FILTER.



*THE LANCET*, September 12, 1891:—  
"We have put the Berkefeld Filter through many rigid tests; we have not obtained the slightest evidence which would enable us to contest any of the statements made in regard to this filter."

### ADVANTAGES.

Rapid, Perfect, and Permanent Filtration.

Easy Cleaning and Sterilization.  
All Descriptions Supplied.

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"CUCA," the Extract of the leaves of "Erythroxylon Coca," is the most valuable addition to the Pharmacopœia this century has produced.

COCOA AND CHOCOLATE are the most, if not the only, really palatable forms in which Cuca can be taken as a dietary article for everyday use, and are consequently being largely recommended by the Medical Profession.

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"My opinion is that you have introduced a most useful preparation of Cocoa. It is simply invaluable in cases of exhaustion, and in recovery from illness. It is extremely pleasant to drink, and I can recommend it with every confidence—not only as a useful 'Pick-up' after illness, but as a valuable article of diet for everyday use. For Oystolists and Athletes I know no better beverage.  
Yours truly,  
"May 6, 1891.

—, M.R.C.P.E., etc."

The *LANCET*, October 3, 1891, p. 771, says:—

"This is an excellent Cocoa. In this novel preparation are contained two substances of very definite therapeutical value, a renowned restorative and a powerful stimulant and tonic."

**ROOT & CO., LIMITED,** SOLE MANUFACTURERS AND PATENTEES,  
38 GREAT RUSSELL STREET, LONDON, W.C.

And of all Wholesale Houses.

Retail Prices—COCOA, in Tins, 1/, 1/11, and 3/6.  
CHOCOLATE, in Boxes, 6d. and 1/.

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**ALPINE MILK RUSKS** (ground) } foods.  
**CREAM MILK**, unsweetened, sterilized.  
**CREMOR HORDEATUS**, delicious substitute for Cod-liver Oil.  
**PURE HORDEUM** (Malt Extract) } also  
with Cod-liver Oil, Hops, Iron, Limes,  
Quinine, and Pepsins.  
**MALT EXTRACT LOZENGES.**  
**MUSTARD LEAVES**, best and cheapest.

Sole Agents—**ROBERT BAELZ & CO.**, 14-20 St. Mary Axe, E.C.

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(FRESH or DRIED).

During December we shall be receiving our first arrivals of Seville Oranges and Messina Lemons, when we shall be in a position to supply the specially machine-cut Peels which have given such general satisfaction to the trade since their introduction. The Fresh Peels are cut free from pith, in small shreds (about  $1'' \times \frac{1}{16}''$ ), a condition acknowledged to be the most favourable for the manufacture of Official Tinctures and Infusions and of Soluble Essences.

The Dried Peels are cut as free from pith as possible, and every care taken in drying to preserve the colour and aroma.

Samples (as soon as ready) will be sent free on application.

**CHARLES SOUTHWELL & CO., DOCKHEAD, S.E.**

## RANDALL'S BLACK CURRANT LOZENGES

Plain Black Currant, old square 2/6	Black Currant Voice (warm
Plain Black Currant, rough oval 2/6	aststringent) .. .. . 3/
Black Currant and Ipecacuanha 2/6	Black Currant Cough Lozenges* 3/6
Black Currant and Tannin .. 3/	*Ipecac. & Morph., strength as "B.P."

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**RANDALL & SON, SOUTHAMPTON,**  
Who will forward Samples by post on application.

Also Brown Cough Lozenges, 2/; 7 lbs. stamped with name free, and Musk Lozenges (Special), 2/6.

N.B.—Medical Lozenges of every kind, including those of the Pharmacopœia of the Hospital for Diseases of the Throat, London, made with Black or Red Currant.





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Composed of Liebig's Extract of Beef, Extract of Malt, and sound Port Wine.

### REPORT ON BEEF WINES.

From the results of my Analyses of various Beef Wines I have had occasion to examine, none have equalled as regards strength, purity of ingredients, and (of no less importance) the skilful and judicious manner in which the respective ingredients have been proportioned and combined, the Liebig's Beef Wine manufactured by Mr. B. ROBINSON, of Pendleton, Manchester.

It is in every sense a reliable preparation, embodying in a pleasing and palatable form all the acknowledged medicinal and nutritive properties pertaining to Liebig's Extract of Meat, Extract of Malt, and sound Port Wine.

WILLIAM ELBORNE, F.C.S., F.L.S.,

Lecturer on Materia Medica in the Owens College, Manchester (Victoria University).

December 15, 1888.

Introduced 1855.]

### ROBINSON'S CONCENTRATED WATERS.

[Introduced 1855.

One Ounce of these Waters added to Forty Ounces of Distilled Water forms a clear Medicated Water (without filtering), similar in every respect to those prepared according to the directions of the British Pharmacopoeia, and free from all Chemical Impurity. They will keep good any length of time in any climate.

Aqua Anethi, Concent., 4/ lb.	Aqua Cinnam. Ver. Concent., 4/ lb.	Aqua Foeniculi, Concent., 4/ lb.	Aqua Pimentæ, Concent. 4/-
" Anisi " 4/ "	" Cassia " 4/ "	" Ment. Pip. " 4/ "	" Rosæ 8/6
" Camphoræ " 4/ "	" Flor. Aurant. " 8/6 "	" Ang. " 6/ "	" Rosæ Virgin. " 10/6
" Carui " 4/ "	" Flor. Sambuci " 8/6 "	" Virid. " 4/ "	

The above are put up in Bottles of 1/2 lb. or 1 lb. and upwards, each of which has the Inventor's Protection Label over Cork.

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**PEPTONES**  
OF  
**BEEF,**  
**MUTTON,**  
**VEAL,**  
AND  
**CHICKEN.**



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(VINUM AURANTII, B.P.), prepared in strict accordance with the Formula of the British Pharmacopoeia.

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1-lb. Jars..... "	7/3	..... "	21/8	1-oz. Jars..... "	8/8	..... "	8/8

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8 lbs. Carriage free.



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The Swiss Blacking polishes twice as quickly as any other, and requires, therefore, only half the labour. For gross, 8'.



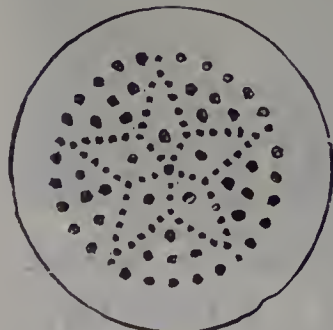
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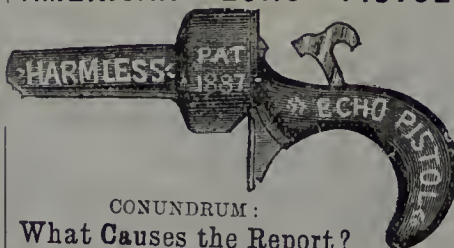
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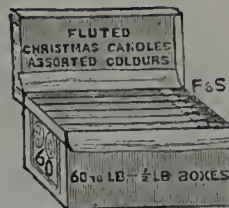
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REGISTERED



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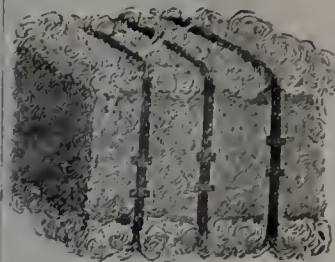
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Fairbanks' make. Capacity—1/2 of an oz. to 8 lbs. List price 41/. We have four in stock at the exceptional low figure of 15/ each.

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Telephone Number, 1852.

Telegraphic Address—CHEMICAL LONDON.

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Bramwell, E., & Son  
Brunner, Mond & Co. (Lim.)  
Bush, W., Son & Co.  
Fletcher Fletcher & Stevenson  
Goodall, Backhouse & Co.  
Greiff, R. W., & Co.  
Hill, A. S., & Son (Clarke)  
Hodgkinson, Treacher & Clarke  
Howard & Son (Pharm.)  
Kuhn, B.  
Levermore, Aug., & Co.  
Lofthouse & Saltmer  
Lorenz, H.  
May & Baker (Lim.)  
Morris & Callard Moss & Co.  
Rende Bros. & Co.  
Smith, T. & H., & Co. (Pharm.)  
Stern, T., & Co.  
Tyer, T., & Co.  
Washington Chemical Co.  
White, A., & Sons  
Zimmermann, A. & M.

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Hocklin, Wilson & Co.  
Liverpool Patent Lint Co.  
Lynch & Co.  
Maw, S., Son & Thompson  
Newbery, F., & Sons  
Pattinson, G.  
Solport Bros.  
Thompson, Walters, Hols & Co.

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National Chemical Co.

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Greiff, R. W., & Co.  
Macfarlan, J. F., & Son  
Smith, T. & H., & Co.  
Wright, Layman & Umney  
Zimmermann, A. & H.



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Howards &amp; Sons

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French Hygienic Soc.

Jocann, Gabriel

Mariani &amp; Co.

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Christy &amp; Co.

Root &amp; Co. (Lim.)

Rowntree &amp; Co.

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Cloments, S. G. &amp; Co.

Evans, Sons &amp; Co.

Greiff, R. W., &amp; Co.

Hill, A. S., &amp; Son

Hookin, Wilson &amp; Co.

Jackson, W. &amp; H.

Lofthouse &amp; Saltmer

Smith, T. J.

Southall Bros. &amp; Barclay

Woolley, Sons &amp; Co.

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Essence)

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Brooks, Peel &amp; Co.

Saunders, H. G., &amp; Son

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Burroughs, Wellcome &amp; Co.

Fuerst Bros.

Hooper, B., &amp; Co. | Leo &amp; Co.

Lloyd, T. J., &amp; Co.

Riehardson, J., &amp; Co.

Wyleys &amp; Co.

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Evans, Sons &amp; Co.

Fletcher, Fletcher &amp; Stevenson

Lloyd, T. H., &amp; Co.

**CONFECTIONERY**

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Gibson, R., &amp; Sons

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Kerfoot, T. | Pascall, J.

Southwell, C., &amp; Co.

Warrick Brothers

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Robinson &amp; Sons (Absorbent)

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Sedox, Absorbents, and Aut-

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Mumford, S. G.

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Fentiman &amp; Co.

Jewsbury &amp; Brown

Lakeman, J. J.

Queich, H. C.

"Salvine" Co.

Stevens, P. A.

Sutton, O., &amp; Co.

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Evans, Sons &amp; Co. (Savars)

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Idris &amp; Co. | Jackson, W. &amp; H.

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Wood, Vincent | Woolf, E.

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Hillock and Co.  
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Dose, 1 to 4.Per 1,000,  
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5/6.Per Stoppered Vase,  
with painted glass  
label, (5,000.)  
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Prices same as for "No. 142."

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Pv. Soc. Aloes, 1 gr.; Pv. Scammony,  $\frac{1}{2}$  gr.;  
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18/9.Write for New Complete Price List of PILLS, GRANULES and PARVULES, &c.,  
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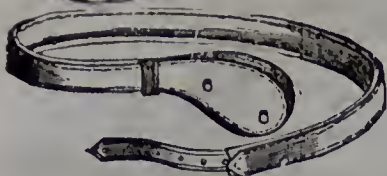




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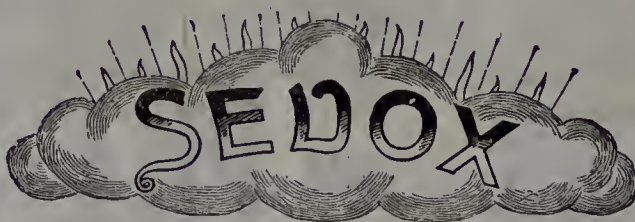
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This dressing is not like any other in the market, being prepared from a pure vegetable fibre with great cleansing properties. The facility with which it is removed from discharging surfaces, and its wonderful absorbing power

**(IT WILL TAKE UP FIFTEEN TIMES ITS OWN WEIGHT)**

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THE NEW FORM FOR MEDICINAL ADMINISTRATION.

"PALATINOID" &  
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Before immersion in water.

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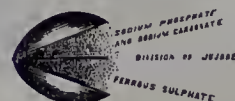
After three minutes' immersion in water  
at normal temperature of stomach.

"BI-PALATINOID" (FERROUS CARBONATE)



After three minutes' immersion.

"BI-PALATINOID" (FERROUS PHOSPHATE)



After three minutes' immersion.

Accuracy of Dosage. Freedom from Excipient. Protection from Atmospheric Influences. Ease of Deglutition. Exemption from Chemical Decomposition. Perfection of Shape and Appearance. Purity of Ingredients.

Samples and Price Lists Free to the Trade on Application.

SOLE MANUFACTURERS AND PATENTEES—

OPPENHEIMER, SON & CO., LTD., 14 WORSHIP STREET, LONDON.

# PURE CANE CASTOR SUGAR.

Guaranteed FREE from BEET, also ULTRAMARINE, and all other IMPURITIES.

It is specially suitable—and has no equal—for the manufacture of MEDICATED SYRUPS and AERATED WATERS, on account of its great purity and easy solubility.

MEDICATED and AERATED WATER SYRUPS of the required strength can be made of this sugar with *Cold Distilled Water*, requiring *neither Heat nor Filtration*, and yielding clear and bright solutions.

## RESULTS OF ANALYSES:—

By Dr. BURGHARDT, Ph.D., &c., and Mr. WATSON SMITH, F.C.S., F.I.C., &c. April, 1887.

CANE SUGAR = 99'889  
FRUIT SUGAR = 0'021  
MOISTURE = 0'090  
ASH = 0'000

*Extract from Report on this and other of our Sugars:—*

"We never met before with specimens of Sugar so pure.  
Their purity is extraordinary."

By Messrs. R. R. TATLOCK & READMAN, analysts, Edinburgh and Glasgow. November, 1888.

CANE SUGAR = 99'887  
FRUIT SUGAR = 0'069  
MOISTURE = 0'044  
ASH = 0'000

*Extract from Report:—*"This sugar is so pure, that it is  
difficult to believe it to be a regular article of commerce."

Mr. FALCONER KING, Analyst to the City of Edinburgh, says in his remarks, October, 1888:—

"Speaking practically, these sugars contain *no impurities at all*, and consist of PURE CANE SUGAR.

THE SANKEY SUGAR CO., 6 DALE STREET, LIVERPOOL.

Works—EARLESTOWN, LANCASHIRE.



# USEFUL AND ORIGINAL



It has always been our aim to assist the Chemist as far as possible in selling ST. JACOBS OIL. We not only supply him with the best remedy for outward application which was ever made, but we furnish him with a class of literature every word of which is eminently suitable for any member of a family to read. We believe in keeping the tone of our announcements equally as high as the standard of excellence of the remedy it advertises.

We believe also in originality and quality. We endeavour to send the Chemist a parcel of advertising matter which he will use simply because it is the best in quality, printing, and originality. We are continually having something new in advertising novelties; at present we have over 1,000 different illustrated designs, registered and in block form, so that we are able to supply something new and original almost every day in the year.

## SENT FREE AND



**M**OST Chemists will use a counter-wrapper for the purposes for which it is intended if the size, quality of paper, and printing are satisfactory. Taking this view of the subject, we have had especially manufactured a paper adapted for this purpose—pure white, with finished surface, good weight, and firm texture. The printing of 50 millions, in three sizes—namely, 4 oz., 6 oz., and 8 oz.—we have entrusted to Mr. Alf. Cooke, of Leeds, whose reputation for turning out excellent work is a sure guarantee that the printing will be exceptionally good. These three sizes are composed of 72 different, specially illustrated designs from original pen-and-ink drawings of our Special Artist, Lieut.-Col. Marshman, of Bath. The printing is on one side only, not covering the entire surface of the paper, but leaving wide margins of white. Some of the illustrations are most artistic, all are original and registered.

From the foregoing it will be observed that we have spared no expense in our effort to supply the dealer with a counter-wrapper which he can use with credit to himself and us. Owing to the different sizes and designs we are unable to print dealers' names and addresses thereon.

## TO ALL DEALERS IN



# ADVERTISING MATTER



OUR book, "A Souvenir," is admitted to be the best book of the year for free distribution. Size  $8\frac{1}{2} \times 5\frac{1}{2}$  inches, 48 pages, 53 illustrations, well printed on good paper, interesting reading matter, gives a full and complete illustrated description of the interior of our London house. Also "A Modern Sermon," "Our Baby," "Uncle Remus," "McCartys' Party." Lots of fun. Light and heavy reading, suited for all classes. Interesting from start to finish. Complimented by the Metropolitan and Provincial Press.

Chemists will find this book one that will please and interest their customers, as well as increase the sale of ST. JACOBS OIL, both the 2s. 6d. and 1s.  $1\frac{1}{2}$ d. sizes.

We print dealers' names and addresses on the "Souvenir." We supply a French edition of this book to the foreign trade, or to any trade who have French customs.

## CARRIAGE PAID



VARIOUS Show-cards for hanging up; Panel Transparencies in colours for affixing to glass, producing a beautiful effect; Hand Picture-cards for distribution; Book-mark Cards, and other novelties are included in each parcel.

The above are sent free (carriage paid), or to a London house for enclosure, to all dealers in ST. JACOBS OIL in Great Britain and Ireland. Dealers who have contracts with London carriers will please give weight and name of carrier. We make up a *special box* of advertising novelties which we send free and carriage paid with all orders of six dozen ST. JACOBS OIL, assorted 1s.  $1\frac{1}{2}$ d. and 2s. 6d. sizes. Price per dozen, where six dozen assorted are ordered at one time, 11s. 3d. and 21s. 6d., carriage paid, cash with order. If we did not do any newspaper advertising, and ST. JACOBS OIL were unknown, the contents of the special box of advertising matter which we send with a six-dozen order, assorted sizes, would create a demand sufficient to sell the lot. Let every live, go-ahead dealer avail himself of this offer, which will save money and increase sales.

Foreign orders delivered to London houses for enclosure or sent with ST. JACOBS OIL, carriage forward, no charge for case or packing.

P.P. The CHARLES A. VOGELER CO. (WILLIAM E. GEDDES, European Manager.)

Telegraphic and Cable Day Address—"RUMATIX LONDON."

Telegraphic and Cable Night Address—"EDUCIBLE LONDON."

Day Telephone No. 6714. Night Telephone No. 2794.

# ST. JACOBS OIL.



# “Please Send Six Boxes.”

This is an order we received this week from one of our friends—a *Retail Chemist*—who introduced our **GLYCERINE and PAREGORIC PASTILLES** (Patent No. 17,213) to his customers last season.

The net profit arising from the sale of the forty-eight pounds of pastilles contained in the boxes referred to amounts to Five Pounds Twelve Shillings, supposing they are retailed at Threepence per ounce. In these days, when the grocers and others seem to take especial delight in tumbling down the profits of the Chemists this is worth noting. No particular effort is required to dispose of the goods, Glycerine and Paregoric being a Household Cough Remedy ; but the Pastille form is a Novelty, and if the Public once see it they **buy and come again.**

As we point out from time to time, we do not deal indiscriminately, but cater for the Drug Trade, and no enquirer who cannot show his title will be supplied with our goods.

Should any Chemist wish to push this line (and we think the above order amply demonstrates its lucrative nature), he may do so without incurring printing expenses, as with each package we send suitable handbills, window tickets, and small and neat package labels.

The boxes are neat and attractively labelled, and suitable for any counter. They contain eight pounds of Pastilles, and upon receipt of Thirteen Shillings and Fourpence a package will be sent free anywhere in the United Kingdom.

We offer every variety of Druggists' Confectionery, including Medicated Lozenges, Jujubes, and Pastilles, Cachous, Candies, Bouquet Lozenges, and Boiled Sweets.

When ordering the Pastilles we respectfully solicit Sample Orders for any of these lines.

---

**BLYTON, ASTLEY & CO.**  
MANUFACTURING PHARMACISTS,  
**EAGLE LABORATORIES, MANCHESTER.**  
**And GREENGATE, SALFORD.**



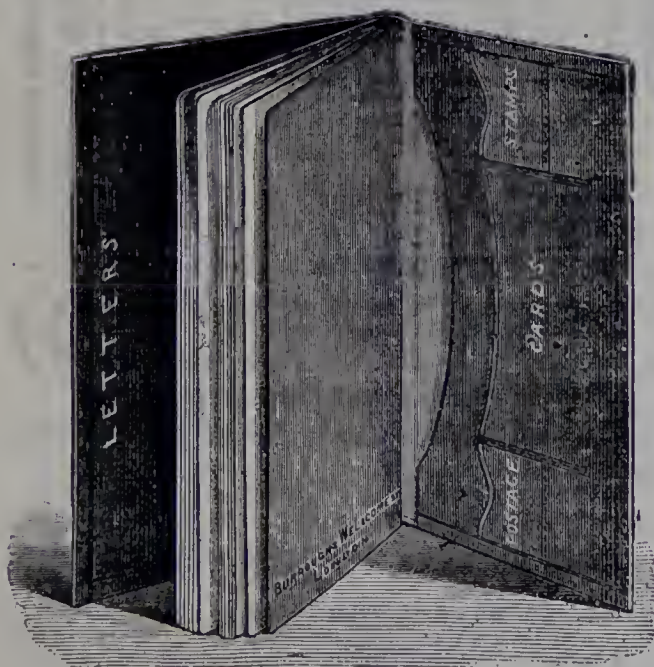
# FRIENDLY TALKS WITH THE TRADE.

## SEASONABLE PRODUCTS

MEDICAL MEN of the progressive school are always anxious to obtain the most compact, convenient, and reliable forms of every article comprised in their armamentarium, and pharmacists having an eye towards their own pecuniary advantage will endeavour to secure those articles possessing the following chief salient features in their favour, viz.:—1. Portable and compact form. 2. Convenient for use, and perfect adaptability to the physician's requirements. It is our intention this week to refer to those articles most suitable as presents for medical men. First—

### THE A B C MEDICAL DIARY & VISITING LIST

Containing spaces for 56 or 112 patients' names each week, obstetric engagements, vaccinations, engagements, cash account, complete posological table, giving minimum and maximum doses of all drugs, and the usual paraphernalia of general information; the book is beautifully bound in watered silk, or with leather tuck cover. The silk-covered Diaries can be carried in the letter wallets supplied; these latter are made with pigskin, velvet pile (a new soft leather), Russia leather, or morocco.



*The British Medical Journal* says:—"The book is compact, convenient, and contains a good deal of useful information."

*The Edinburgh Medical Journal* says:—"The book is elegantly got up, and contains much valuable information."

#### PRICES.

In Silk Cover for fitting in Wallet .. .. .	2s. 6d.
In Tuck Covers .. .. .	2s. 6d.
In Silk Covers in Morocco Wallet, to hold letters, stamps, cards, &c. .. .. .	4s. each
Do. do., in Velvet Pile (new leather) Wallet .. .. .	5s. each
Do. do., in Pigskin Wallet .. .. .	4s. each
Do. do., in Russian Leather Wallet .. .. .	5s. each

Name Stamped in Gold 6d. extra.

#### PERPETUAL DIARY.

We also issue a Perpetual Medical Diary, which is arranged so as to be conveniently used for any date or year.

Silk Covers .. .. .	4s. each
Leather Tuck Covers .. .. .	4s. each

### THE HYPODERMIC TABLOID POCKET CASES (B. W. & CO.)



Fitted complete with Hypod. Syringe, Needles, and 12 Tubes of Tabloids, according to selection, 15/- complete.

According to Professor Roberts Bartholow, the most important improvement made in Hypodermic Medication was the introduction of the Wyeth Compressed Hypodermic Tablets, of which the Hypodermic "Tabloids" are the immediate successors. The Hypodermic "Tabloids" are prepared upon the same machines, in exactly the same manner as the Wyeth Tablets. The "Tabloids" contain definite quantities of the agents employed for Hypodermic medication mixed with a small quantity of an appropriate basis to aid in the solution of the article. The chief medicaments now employed hypodermically are put up in this form. The reason for the introduction of the Hypodermic "Tabloids" is very apparent. Permanent solutions, although very carefully prepared, rapidly deteriorate by keeping. In two or three days a faint cloud appears, and the solution rapidly becomes turbid. This turbidity is due to the development of a minute organism, the *Penicillium*. This plant grows in all solutions containing organic materials, at their expense, hence, while solutions increase in turbidity, they decline in strength. Moreover, solutions frequently cause an indurated and painful swelling at the seat of injection. The Hypodermic "Tabloids" are readily soluble in a few drops of water. The "Tabloids" keep perfectly for an indefinite period. They are very compact, and the Hypodermic Pocket Cases supplied by us are much in demand amongst Medical men. In fact, they are generally considered to be an essential part of the physician's armamentarium. It will pay chemists to stock these "Tabloids" and one or two of the Pocket Cases, for they can be readily sold to Medical men in the neighbourhood.

NOTE.—In ordering please be careful to specify Hypodermic "Tabloids," as they have now been imitated.

BURROUGHS, WELLCOME & CO., Snow Hill Buildings, LONDON, E.C.









ESTABLISHED 1858.

PRINCIPAL OFFICE, 43 CANNON STREET, LONDON, E.C.

BRANCH OFFICES:

MELBOURNE AND SYDNEY, AUSTRALASIA.

Published every Saturday.

Subscription 10s. per year, payable in advance; dating from the commencement of any month.

Supplied only to persons connected with the Trade.

Post free to every country in the world. Single copies 4d. each.

Cheques or Postal Orders should be payable to EDWARD HALSE, and crossed MARTIN'S BANK (LIMITED).

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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## SUMMARY.

SEVERAL recent books are reviewed.

TWO members of the Irish Pharmaceutical Council figure in our marriage list.

OUR Bankruptcy Reports and Deeds of Arrangements are painfully extensive this week.

WE give a biographical note and portrait of Mr. William Gilmour, who has retired from the Edinburgh Board of Examiners.

ANALYSIS has proved that the "morphia mixture" dispensed by a chemist's apprentice at Exeter was a 2-gr.-to-the-oz. solution of strychnine.

SOME curious particulars respecting the history of apothecaries in France, showing how the history of pharmacy repeats itself, are given in an editorial article.

SEQUAH (LIMITED) has proceeded in the Scotch Court of Session against a Glasgow confectioner for selling "Squaw Oil." The judge appears to be in Sequah's favour.

IT will be seen from an article appended to the Trade Report that the Germans are taking active steps to encourage the cultivation of drugs in their East African colony.

THE Executive of the North British Branch have considered how they can extend the Society's influence in Scotland, but have not yet come to a definite conclusion.

OUR obituary column contains a sketch of the life of Mr. T. Hyde Hills, a past-president of the Pharmaceutical Society, and head of the firm of John Bell & Co, Oxford Street.

MR. CRIPPS contributes an article, read at Birmingham, on the indicators used in alkalimetry. This consists of a criticism of the properties and hints regarding the application of the best-known indicators.

OUR TOWN TRAVELLER has picked up some useful bits of information in going about town in search of Christmas novelties. In an editorial note we comment on the possibilities of extra trade for chemists at this season.

WE print the first of what, we hope, will be a series of articles on modern pharmacies. Bournemouth, Newcastle, and Scarborough supply the pharmacies on this occasion, and we describe them and the businesses conducted in the premises illustrated.

SEVERAL important letters appear in our correspondence pages. Mr. A. H. Allen replies to Mr J. C. Umney's criticism of his aconitine assay process; Mr J. H. Fisher asks the trade if the time has not come for raising prices a little; Mr. Dott and Mr. A. Turner comment upon the purity of chloroform; and there are letters on the sale of poisons, stocktaking, &c. Mr. Pond replies to his critics in our dispensing column. These, with replies to correspondents, afford seven pages of useful reading.

## SCIENTIFIC MYSTERIES.

Ready on December 1. An octavo book, 100 pages, with 80 illustrations, and descriptions of nearly 200 chemical, physical, and optical experiments and illusions.

For Chemists to Sell at 1s.

Most attractively produced; sure to be popular and to introduce business in chemicals and apparatus. Net price to chemists for not less than one dozen, 8s. 6d., delivered in London; or the books may be ordered at this price from most of the wholesale firms. The following firms have already undertaken to keep stock:—

Ayrton & Saunders, 149 Duke Street, Liverpool.  
 Barclay & Sons (Limited), 95 Farringdon Street, E.C.  
 Bleasdale, Wm., & Co., York.  
 Boileau & Boyd, 91-93 Bride Street, Dublin.  
 Duncan, Flockhart & Co., 104 S. Cannon Street, Edinburgh.  
 Edwards, Wm., & Son, 157 Queen Victoria Street, E.C.  
 Evans, Gidd & Co., 97 Fore Street, Exeter.  
 Evans, Lescher & Webb, 60 Bartholomew Close, E.C.  
 Evans, Sons & Co., 55 Hanover Street, Liverpool.  
 Hirst, Brooke & Hirst, Leeds.  
 Ismay, John, & Sons, Newcastle-on-Tyne.  
 Lloyd, T. Howard, & Co., Leicester.  
 Maw, S., Son & Thompson, Aldersgate Street, E.C.  
 May, Roberts & Co., 9 Clerkenwell Road, E.C.  
 Newbery, F., & Sons, King Edward Street, E.C.  
 Potter & Clarke, Raven Row, Artillery Lane, E.  
 Raines, Clark & Co., Edinburgh.  
 Raines & Co., York.  
 Sanger, John, & Sons, 489 Oxford Street, W.  
 Silverlock, H., 92 Blackfriars Road, S.E.  
 Southall Bros. & Barclay, Birmingham.  
 Sutton, W., & Co., 76 Chiswell Street, E.C.  
 Thompson, John, Hanover Street, Liverpool.  
 Thompson, Walters, Hole & Co. (Limited), Curtain Road, Great Eastern Street, E.C.  
 Woolley James, Sons, & Co., Manchester.  
 Wright, Layman & Umney, Southwark Street, London.  
 Wyleys & Co., Coventry.

## THE CHEMISTS' AND DRUGGISTS' DIARY, 1892.

WE shall begin to deliver this to home subscribers on December 1. Will everyone please note that in all cases carriage is prepaid?—but should the carrier make any charge on delivery, we would be obliged if subscribers would pay and take receipt. On forwarding the receipt to us we shall refund the outlay.

Subscribers are requested to notice the Eight-guinea Coupon Competition offered in the DIARY.



## English News.

**BROMINE IN CHESHIRE.**—In a lecture at Winsford last week Mr. Edward Davies, of the Royal Institution, Liverpool, stated that he had obtained bromine from Cheshire brine. This is the first time it has been found in this source.

**LIVERPOOL PHARMACEUTICAL STUDENTS' SOCIETY.**—At the fortnightly meeting of this society a paper on "The Manufacture of Aërated Waters" was read by Mr. T. S. Wokes, Ph.Ch., and one on "Suppositories" by Mr. Hetherington.

**BRIGHTON JUNIOR ASSOCIATION OF PHARMACY.**—The members of this association held a social evening on November 18. Mr. A. P. Nosworthy, ex-president, was in the chair. A selection of songs, recitations, &c., was given by Messrs. Ridgen, Barnard, Keates, Snow, Harris, Colman, Digbey, and Blamey.

**SERIOUS CHARGE AGAINST A CHEMIST.**—William Utting, dispensing chemist, of Kirkdale Road, Liverpool, has been committed to the assizes on a charge of criminally assaulting a boy of seven in the dispensary on November 14. Prisoner was admitted to bail—himself in a surety of 500*l.*, and two others of 250*l.* each.

**THE CHEMISTS' ASSISTANTS' ASSOCIATION.**—Mr. A. H. Allen, of Sheffield, who was to have read a paper on December 3, has been obliged, owing to unforeseen circumstances, to postpone his engagement. The evening, therefore, will be devoted to "Impromptu Discussions" on subjects suggested by members.

**WILEY'S CRICKET CLUB** enjoyed their first annual dinner at the Leicester Inn, Coventry, on November 20. About fifty members and friends formed the company. Mr. H. W. Jones, presided, and Mr. J. M. Bennett occupied the vice-chair. It was reported that the club had played 14 matches last season, of which they had won 12. Mr. Jones said Mr. Wiley hoped to wield the willow himself next year, and would help the club all he could.

**NOR A PATENT MEDICINE.**—Mr. George Dickenson, a grocer, was summoned at York last week for selling tobacco, sweets, and methylated spirit at a branch shop without being licensed. With regard to the first two he said he was licensed at his principal shop, and he thought it was a personal licence, and covered the sale elsewhere. He had a patent-medicine licence, and thought that included methylated spirit. Fined 40*s.* and costs four times over.

**OPPOSING THE ALKALI ASSOCIATION.**—We have previously reported the establishment in the Glasgow district of chemical-works which propose to give the Alkali Association some trouble. A concern with similar objects is now to be formed (as mentioned in our Trade Report last week) on the Tyne under the style of the Northumberland Chemical Works. The factory is at Heworth Shore, with a good riverside frontage, where the manufacture of acid, sulphate, ash, crystal soda, and bleaching-powder will be carried on by means of the most perfect and latest appliances. Mr. J. C. Rollin will act as managing director.

**THE EFFECTS OF CHLORAL.**—Edward Marshall, described as a gentleman, was summoned at the Blackpool Police-court, on a charge of being drunk and disorderly and knocking down a clergyman. Mr. Marshall expressed deep contrition, and explained that he was a slave to chloral hydrate, and had previously been enchaind by cocaine. Medical men, he said, would support him in the statement that when the system was charged with chloral hydrate, a very small quantity of spirits would produce intoxicating influences and cause mental derangement. He was fined 2*s.* 6*d.* and costs for being drunk and disorderly, and 1*l.* and costs for the assault. The money was paid and a sum contributed to the poor-box.

**CHEMICAL SOCIETY.**—At the meeting to be held on Thursday, December 3, at 8 P.M., there will be a ballot for the election of Fellows, and thereafter the following papers will be read:—"Phosphorus Oxide: Part II., by Professor

Thorpe, F.R.S., and A. E. Tutton; "On Frangulin: Part II.," by Professor Thorpe and Dr. A. K. Miller; "The Structure and Character of Flanacs," by A. Smithells and H. Tingle; "The Composition of Cooked Vegetables," by Miss K. J. Williams; "On the Occurrence of a Mydriatic Alkaloid in Lettuce," by T. S. Dymond; "On Some Metallic Hydro-sulphides," by S. E. Linder and H. Picton; "On the Physical Constitution of Some Solutions of Insoluble Sulphides," by Harold Picton; and "Solution and Pseudo-Solutions," by H. Picton and S. E. Linder.

**THE SELLER UNDER THE FOOD AND DRUGS ACT.**—At the fortnightly meeting of the Battersea Vestry Mr. Turner drew attention to a recent decision of a police-court magistrate upon a summons taken out under the provisions of the Food and Drugs Act, to the effect that the person who physically handed an impure article to a purchaser was the person liable to be summoned, and not necessarily his employer. He (the speaker) now moved, "That having regard to the great importance of the subject, the question be referred to the Finance and Law Committee, with instructions to confer with the solicitor, and to take such steps in the matter as they might consider necessary." After some discussion, the motion was rejected.

**CHARGE AGAINST A MINERAL-WATER MANAGER.**—Before the Sheffield stipendiary, on Tuesday, Jonathan Bear, manager, traveller, and cashier to Mr. Augustus Hadfield Bennett, mineral-water manufacturer, was charged with embezzlement. It was alleged that the defendant, who had received 30*s.* per week, and 15*s.* for travelling expenses, had collected money for which he had not accounted. When spoken to, he offered to pay back whatever was deficient by 7*s.* 6*d.* per week; but the prosecutor required it all in fourteen days. Mr. Neal, who represented the defendant, said he should show that his client had been Mr. Bennett's gambling agent, and that part of the money, at any rate, had gone in making bets for him. Mr. Wilson, on behalf of the prosecutor, denied that such was the case. The defendant, who reserved his defence, was committed to the sessions for trial, bail being allowed.

**PARAGORIC SUBSTITUTE AND SPIRITS OF NITRE.**—At Carnarvon six shopkeepers from the Llanallyfni district have been summoned under the Food and Drugs Act for selling spirits of nitre not of the strength prescribed by the British Pharmacopœia. Fines of 2*s.* 6*d.* and costs were imposed in each instance. At the County Court, at the same time, G. G. Owen, grocer, Pengygroes, was summoned for selling 3 oz. of a compound known as "paregoric substitute," which, upon being analysed, was found to contain no opium. Mr. R. Roberts defended on behalf of Messrs. Bell & Sons, Liverpool, the manufacturers of the compound. He produced the bottle from which the stuff was measured, and which, in prominent letters, was labelled, "Paregoric Substitute." In reply to the bench, the officer said that he saw the bottle, but he did not notice the word "substitute." He asked simply for paregoric, and defendant did not inform him that the stuff was not paregoric. The bench fined the defendant 2*s.* 6*d.* and costs. Mr. Roberts gave notice of appeal.

**SUITABLE FOR A CHEMIST.**—The advertisement which appeared in the *City Press* a week ago, with reference to the proposed sale of Park House, Holly Park, Crouch Hill, emanated, I expect, from Mr. W. Jenkinson, late C.C. for the Ward of Coleman Street. The property, which may with all truth be described as desirable, has a history of its own. Situated within easy reach of the City, it is as secluded as if it was forty miles away, and the property was named Holly Park by Mr. Jenkinson, with the consent of those concerned. Originally it was known as the Quakers' Ground, and was owned by Mr. Barry, a partner in the eminent firm of chemists in Plough Court, Lombard Street, and who, many will remember, devoted himself with much energy and great ability to the question of the abolition of capital punishment. Mr. Barry spent much time and money over the property, having laid it out into twenty plots divided by holly hedges. He also made roads and ornamental grounds, and put down no fewer than thirty miles of drain-pipes in his anxiety to improve the estate. Mr. Jenkinson's house ought to find a ready purchaser.—*City Press.*

**SOLIDIFIED PETROLEUM.**—Last week a demonstration was given at the works of the Solidified Petroleum (Pioneer)



Corporation, Gainsborough Road, Hackney Wick, of the process of converting liquid into solid petroleum by Chenhall's method. In this the crude petroleum is mixed with about 15 per cent. of chemicals which are in themselves combustible. The vessel containing the mixture is placed for a short time in boiling water, which causes fusion to take place, and is then transferred to a furnace having a temperature of from 400° to 500° F., the mixture being kept stirred. In a short time solidification takes place, after which the compound is pressed into blocks for use as fuel. The whole process, from the first mixing to solidification, occupies only about half an hour. The solidified petroleum burns freely, and with but a small percentage of ash. The nature of the chemicals employed is as yet a secret, but those interested say that the new fuel could be sold much cheaper than coal. Sir Edward Reed and Mr. Boverton Redwood are amongst those who speak well of the process and its results.

**A PROFESSOR'S DEBTS.**—In the Westminster County Court on Tuesday, before the deputy judge, the case of the London and Southern Counties Investment Company v. Day came on for hearing on a judgment summons, by which the plaintiffs sought to enforce an order of the court. Evidence was called for the plaintiffs to the effect that the judgment debtor, Mr. James J. Day, was a professor of chemistry, and was also a partner in a photographic business in Berners Street, Oxford Street. It was contended that he was well able to pay the amount of the judgment debt, and therefore a committal order against him was applied for. The defendant appeared in person, and said the business in Berners Street was his father's, and he (defendant) had no property whatever in it. His financial position at the present time was such that it was utterly impossible for him to pay this money, and he was not prepared to make any offer. The learned judge said it would be better to hear what the defendant's father had to say upon the subject, and for that purpose he would adjourn the case for a fortnight, in order that the plaintiff might, in the meantime, issue a subpoena.

**THEFT OF SYPHONS AT MARYLEBONE.**—At the Marylebone Police-court, on Tuesday, November 24, Wm. Wood was brought up on remand, charged with having received and sold three mineral-water syphons (the property of Mr. John McKnight, chemist and druggist, of 290 Euston Road), knowing the same to have been stolen. Mr. McKnight deposed that on November 15 a man came to his shop and purchased the contents of three syphons, giving an address in the neighbourhood. He supplied the waters, but, being rather suspicious, told his boy, Charles Watts, to follow the man and see if he went to the address given. A short time after the prisoner was brought to his establishment by Police-sergeant Twigg, who informed him that Wood had sold the syphons to a chemist in Lamb's Conduit Street. He then gave the man in charge. Charles Watts, a smart-looking boy about 15 years of age, said he followed the man who bought the syphons until he met the prisoner near Gower Street. They then went to a passage and emptied the waters out of the syphons. He continued to follow them until they came to the shop of Mr. Wilson, chemist, Lamb's Conduit Street, when the prisoner entered the shop with the syphons, the other man standing outside. Watts then called the police-sergeant, who was passing, and he took Wood into custody. Wm. Pillsbury, assistant to Mr. Wilson, said the prisoner brought three syphons in to him for sale, saying he had bought them from a person who was leaving his house. He (Pillsbury) bought them for 3s. 3d. Police-sergeant Twigg corroborated, and the prisoner, who pleaded guilty, was sentenced to a month's imprisonment.

**THE GROCERS' FEDERATION.**—A large meeting of grocers was held at Birmingham, on November 18, when a federation of a large number of local associations was formed and Alderman Barrow, of Birmingham, was elected president. In his opening address the president said someone had set down "technical education" on the agenda, but he was afraid they could not establish an examination which persons must pass before carrying on the trade, such as was permitted to chemists and druggists; he agreed, however, it would be a good work to raise the general education of grocers throughout the country. They did not aim to form a trade-union. Their real object was to protect themselves against unjust laws. The proposed rules would have admitted members of

"allied trades" but this was struck out, and it was agreed to limit membership to grocers, provision-dealers, and oil and Italian warehousemen. One speaker was inclined to admit patent-medicine vendors. The meeting discussed a draft Bill to require shops to be closed at 7 P.M. on four nights of the week, and at 9 P.M. and 10 P.M. on other nights—a two-thirds majority of the shopkeepers in each trade to decide in each locality which should be the early evenings. Chemists', refreshment-houses, tobacconists', and some other shops to be exempt, but not to be allowed to sell articles after hours which the closed shops generally dealt in. By 28 votes to 10 the conference resolved in favour of some sort of legislation. There was a long discussion on the Sale of Food and Drugs Act, and the executive was asked to draft a Bill to amend it in several particulars. One special improvement advocated was to make the invoice a warranty, as is the case in the Margarine Act—that is, to make wholesale dealers responsible for their invoices. A definite standard of coffee and chicory mixture was demanded, and greater facilities for testing the stocks of wholesalers and importers. Among other subjects discussed was a resolution submitted by the Manchester and Salford delegate asking the association to take vigorous action to induce manufacturers to refuse supply of goods to traders who cut prices of proprietary goods below a living profit: 8 per cent. was the Manchester idea of the limit. Others said 8 per cent. was not a living profit, while another gentleman remarked that it was no use to talk of any percentage. They must follow the great stores.

#### IRISH NEWS.

**MR. E. M. HODGSON, M.P.S.I.**, of the firm of McMaster, Hodgson & Co., Dublin, was last week re-elected, by a large majority, as a Town Commissioner of the Rathmines township. Mr. Hodgson has held this office for many years.

**NEW PHARMACY AT ROSCOMMON.**—Mr. George Phillips, L.P.S.I., for many years senior assistant to Mr. Robert Simpson, Henry Street, Dublin, has opened a first-class dispensing and general drug establishment in Roscommon.

**THE DRUGGISTS' EXAMINATIONS.**—The announcement of the Druggists' Examinations, to be held next month, which we published last week, was incorrectly given. The examination on December 3 is under Section 8, while that on December 16 is under section 7. In our announcement the order was reversed.

**CHARGE OF STEALING POISONOUS DRUGS.**—A special court of petty sessions was held in the Courthouse, Larne, on Thursday last, when a woman named Mary O'Neill was brought up on a charge of stealing a box of poison, the property of Dr. M'Ninch, M.D., Pound Street, Larne. The prisoner was remanded.

**UNQUALIFIED DISPENSERS TO HOSPITALS.**—In pharmaceutical circles in Dublin much comment is being made at present in connection with the appointment of unqualified assistants to act as dispensers in some of the Dublin hospitals, and it is more than probable that the subject will engage the attention of the Pharmaceutical Council at their next meeting.

**POISON FROM DISPENSARIES.**—At Jervis Street Hospital, Dublin, on Thursday, November 19, Dr. J. E. Kenny, M.P., city coroner, held an inquest on the body of a woman named Mary Ann Toolc, aged 60, who died on Tuesday by poisoning from a "liniment," taken internally in error. Mr. Nolan, compounder at Langrishe Street dispensary of the North Dublin Union, deposed that he had supplied the deceased with a liniment containing chloroform, belladonna, and aconite, in a bottle labelled "Poison." Further evidence showed that deceased, who was unable to read, swallowed about 2 oz. of the liniment, being under the impression that it was intended for internal use. The jury found a verdict of "Accidental poisoning."

#### SCOTCH NEWS.

**MR. J. LAIDLAW EWING**, chairman of the North British Branch, is to give the Edinburgh chemists' assistants a lecture on a trip to Russia, with lime-light views. This has been arranged for since the beginning of the session, and is to be given in February.



**EDINBURGH ROYAL SOCIETY.**—Sir Douglas MacLagan, M.D., the Privy Council's visitor to the Pharmaceutical Examinations, has been appointed president of this society. Professor Crum Brown (secretary) and Professor W. H. Perkin are the representatives of pure chemistry on the Council.

**OIL COMPANY IN DIFFICULTIES.**—In the Court of Session, Edinburgh, last Saturday, a petition was presented for an order to wind up the West Lothian Oil Company (Limited). The company was incorporated in 1833, the nominal capital being 100,000*l.* in 1*l.* shares. The company owns oil-works near Bathgate, and has carried on business unsuccessfully for several years. A creditor for 2,400*l.* made the application.

**GLASGOW HEALTH COMMITTEE AND THE SALE OF GREEN PEAS.**—The Health Committee of the Glasgow Town Council at a recent meeting had the green-peas question again under consideration, and, in view of the decision of the High Court, the committee directed the sanitary inspector to drop proceedings in the pending action against a local shopkeeper for a similar offence, where the amount of copper is 1.5 grain (in the case decided the proportion of copper alleged was 1.4 grain). Instructions, however, were given to prosecute to judgment the case against another dealer, where the amount of colouring with copper is 2.5 grains per *lb.* Two members dissented from this decision of the committee, whose proposal was, however, adopted by the Council on Monday last. It is understood that the case will come up for hearing at the end of next week.

**A CHEMIST'S WINE LICENCE.**—At the Burgh of Dumfries half-yearly Licensing Court, held on October 20, an application was made for a certificate for the sale of medicated wines only to be consumed off the premises, by Mr. Wm. Allan, on behalf of Messrs. Carruthers & Allan, chemists. The licence was unanimously granted, the provost remarking that such applications were new to Dumfries, but it would be understood that the licence was restricted to medicated wines, and it would be drawn up in that form by the town clerk. When the Confirmation Court met on November 18 the clerk stated that he had pointed out to the applicant and his agent that the application was incompetent, in respect that the licence provided for the sale of a particular manufacturer's liquor, and was not conformable with the statute. Mr. Allan had, in consequence, withdrawn his application.

**ALLEGED EXTENSIVE THEFTS AND RESET.**—In the Aberdeen Police Court on Saturday, November 21, a remand was granted to permit of further inquiries being made to detain Robert Paterson and Christopher Byres, described as general dealers, and William Jack, warehouse porter, who were arrested on suspicion of having stolen at various times large quantities of goods from the premises of William Davidson, wholesale druggist and drysalter, Castle Street. Paterson and Byres were examined before Sheriff Brown on Monday, on a charge of having resetted between August 1, 1890, and Nov. 20, 1891, large quantities of goods, consisting of mustard, black lead, blue, tinned meat, pepper, rice, semolina, fat, raisins, oil, and essence of coffee, to the estimated value of 300*l.*, and said to be stolen from Mr. Davidson's premises. The prisoners were committed for further examination.

**GRAHAM MEDAL.**—At last week's meeting of the Glasgow Philosophical Society, Professor Dittmar was presented with the Graham gold medal in recognition of the ability shown in his paper on "The Gravimetric Composition of Water." In the annual report of the Council it was stated that the paper was communicated to the society last session, and was the joint production of Professor Dittmar and Mr. J. B. Henderson. It was regarded as a valuable contribution to chemical science, and as being well worthy of the society of which Graham was formerly a vice-president. Professor J. G. McKendrick made the presentation, and explained that the council thought it only right to recognise Mr. Henderson's work by presenting him with a silver duplicate of the medal and "Thorpe's Dictionary of Applied Chemistry." Professor Dittmar, in his reply, stated that Mr. Henderson had gone to Australia for the benefit of his health.

**INFLUENZA** is gradually coming southwards. Several towns on the east coast of Scotland south of Edinburgh have been attacked, and it has now reached Newcastle-on-

Tyne. At a meeting of the Town Improvement Committee at Newcastle on Monday, it was stated that the chairman, the city engineer, the medical officer of health, and the town clerk were all confined to their homes, and the meeting had to be adjourned. It is generally understood that the disease is not of so virulent a type as prevailed last winter, but it is as weakening, and as liable to be followed by complications.—A Border correspondent writes: Business has been extremely good during the last three weeks on account of the influenza epidemic, and there was quite a run on phenacetin, antipyrin, and salicin. Quinine is now largely asked for toning up the system after the weakening effects of the influenza. Dumfries benefited first by the influenza. Now it has travelled north, and it has almost abated here, after having laid up for two or three days at a time from five to six thousand people.—Dr. Russell, the medical officer for the city, reported to the Glasgow Town Council, on Monday, that influenza is very prevalent amongst the inhabitants just now. Within the past fortnight 11 deaths were registered from the disease. Owing to the presence of this disease and to an outbreak of scarlet fever, it has been found advisable to open the Parliamentary Road reserve hospital for cases of influenza, measles, and whooping-cough, to relieve the congested wards at the Belvidere Hospital. The Convener of the Health Committee remarked at the meeting that there was no need to disguise the fact that influenza was having a very serious effect upon the health of the city.—In Edinburgh there were 6 deaths from influenza last week. There are some cases in Leith. A school has been closed at Methil, Fifeshire, owing to the epidemic. There are about 200 cases in Alloa, and it is so severe in and about Ayton that there is the greatest difficulty in getting people to attend to the cattle and sheep. In the Dunfermline district the influenza has been much more severe during the past month than it was last season.

**MR. HOWIE'S DUNDEE LECTURE.**—The Dundee Chemists' Assistants' and Apprentices' Association had a clever and artistic programme for Mr. Howie's lecture on "Ober-Ammergau." It showed a series of views finely engraved in the most delicate sepia tints, each one forming an exquisite little picture. A correspondent writes in regard to the lecture: "The attempt made last Thursday evening to provide a popular entertainment on a large scale for the public of Dundee proved eminently successful in every respect. The Gilfillan Hall was completely filled with an audience numbering about fifteen hundred, and representing, besides the entire local pharmaceutical community and a number of the doctors, most of the professions and the culture of the city generally. The lecture, 'To Ober-Ammergau and Back in 1890,' by Mr. W. L. Howie, F.C.S., of Messrs. Barron, Harveys & Co., London, was illustrated by 120 lime-light views photographed by himself. Mr. Charles Kerr, honorary president of the association, occupied the chair. The audience was conducted in imagination over the most interesting points to be seen in the old Bavarian cities, rich examples being also shown of the architecture and artistic works to be seen in the museums and art galleries. The various pictures as they passed in succession were enthusiastically received, and the audience listened with rapt attention to Mr. Howie's graphic descriptive narrative. This was particularly marked while some of the Passion-play pictures were on the screen, the most perfect stillness prevailing. Of more pharmaceutical interest were the pictures of the 'Historical Pharmacy' which is to be seen in the Germanic Museum, and which was described and illustrated in THE CHEMIST AND DRUGGIST some time ago. The ancient jars, chiefly of majolica ware, and some of them very beautiful, were clearly shown in the photographs, as were the designs on the large jars for the two old electuaries, mithridate and theriaca, and sundry other objects which recalled the apothecary's shop at Mantua, this shop harmonising well with the dramatist's description, and the pictures were doubly interesting, as certain of these very earthen pots were already one hundred years old in Shakespeare's day. The varied series of photographs, which have gained several medals at recent photographic exhibitions, included pictures of life and scenery in the Tyrol, and several of those curious earth pyramids which are to be seen in these parts, but which Mr. Howie found a matter of extreme difficulty and danger to photograph. The meeting was designed for



the benefit of the association's finances, and the result of the silver collection was that a handsome surplus was handed over for this purpose, Mr. Howie generously bearing part of the expense."

**EDINBURGH CHEMISTS' ASSISTANTS' AND APPRENTICES ASSOCIATION.**—At the meeting held on Wednesday, November 18, Mr. J. Rutherford Hill read a paper on "Things to do," communicated by Mr. Peter MacEwan. In this paper the author put forward the plea that commercial knowledge is as necessary for success in pharmacy as technical skill and knowledge: high commercial morality is as important in the affairs of the life pharmaceutical as acquaintance with the sciences. He, therefore, urged that, without neglecting the scientific and practical side, young pharmacists should set themselves earnestly to master details which may be useful to them when they go into business. Amongst the details upon which comment was made were acquaintance with commercial varieties of drugs and chemicals, and regular study of market reports; careful attention to public taste in the matter of medicinal specialities, and regular collection, examination, and proving of formulæ; courteous treatment of the penny customers, who, he stated, contribute 75 per cent. of the counter-work in most pharmacies, and just about 50 per cent. of the returns. Generally he urged methodical care, before and after going into business, in regard to correspondence, bookkeeping, and other clerical operations which facilitate a prompt answer to "How do I stand?" Mr. MacEwan was of opinion that few have the ability to commence business on their own account immediately after they qualify professionally, and he advised young pharmacists to spend from three to seven years after that in securing commercial qualification, before they ventured to trade with their own cash or with other people's money. Previous to this Mr. W. B. Cowie, secretary, read two notes by himself. The first was on "A Reliable Test for Oxides or Hydrates." In this he showed that if ammonium chloride be used for detecting these by boiling and allowing free ammonia to act on litmus-paper, there is an error, as the chloride when boiled with water only also reacts on this paper. Phenolphthalein paper is preferable, as it only becomes purplish red when fixed hydrates are present. The second paper called attention to the fact that sulphuric acid (as  $\text{CaSO}_4$ ) is sometimes found in tartaric acid, and Mr. Cowie advocated that a test for this impurity should be made official. The reading of the papers was followed by a discussion taken part in by Messrs. Cowie, Duncan, Findlay, Hill, and MacEwan. The Chairman reminded members of the *convenzione*, which takes place on December 11, and for which all arrangements had now been completed. He also intimated that the next meeting would be held on Wednesday, December 2, when papers on "Recent Additions to the Herbarium," by Donald MacEwan, and "A Session at a Chemistry Class," by Alexander Murray, will be read.

## Foreign and Colonial News.

**CAPE TOWN CHANGES.**—Mr. N. Fick who has been nine years with Messrs. Wentzel & Schleswig, of Cape Town, and has managed their retail department during the past five years, has bought the St. Mary's Dispensary in Cape Town, and will carry it on in his own name. Mr. William Yongg, late of Edinburgh and Glasgow, has taken a position in Messrs. Wentzel & Schleswig's pharmacy.

**ALLEGED CANCER-CURE.**—At a recent meeting of the Vienna Medical Society, Professor Adamkiewicz exhibited a patient whose cancer he declared had been cured by his treatment. A discussion arose on this case, in which Professors Billroth, Kaposi, and Dittl opposed Adamkiewicz's theory, and declared that he had neither effected a cure nor even an improvement in the condition of the patient. Finally Professor Adamkiewicz promised to continue his experiments, and to submit further cases to the society as soon as possible.

**ACETATE OF LIME IN AMERICA.**—The American manufacturers of acetate of lime held an annual meeting in Binghamton, N.Y., on October 28, and endeavoured to agree to limit the

production; but they could not come to an understanding, and over-production will therefore continue unless the low price of 1c. per lb. should cause some of them to stop making. About one-half of the production is exported, but high ocean freights and new tariff measures in some foreign countries have lately prevented the usual quantity being taken abroad. The home consumption is also light. Supplies of acetate of lime are accumulating, but the stocks are not excessively large, and in some previous seasons they have been greater.

**A GOOD REPORT.**—The directors of the Deutsche Gold-und Silber-Scheide Anstalt, Frankfurt, state in their report for 1890-91 that the gross profits of the works amount to 1,006,166m., and the net profits divisible among the shareholders to 945,460m. The extraordinary advance of electrical science has caused the directors to establish an experimental electrical factory of their own. A discovery, which is likely to be of great technical advantage, took place during the year. It consists of a new process of separating the silver from lead ores, which results in an enormous saving of expense and of time. Experiments had been carried on for many years, with a view of discovering such a process. Patents for its protection are now being taken out.

**SEQUAH IN HOLLAND.**—Sequah is still pursuing his operations in the Low Countries, not without frequent collisions with the strong arm of the law, for the regulations against the exercise of medical and pharmaceutical functions by unqualified persons are strict in Holland. Last week the manager of the company had to answer before the Amsterdam District Court to a charge of illegally practising the healing art. The public prosecutor demanded a fine of 200fl.; but the court reserved its decision until November 28. The opinion held by Dutch pharmacists generally of the esteem which they owe to their profession may be inferred from the announcement in the Dutch organ of the profession that with the exception of one individual, who is described as an "apotheker-quack," Sequah has not, so far, been able to find a single pharmacist in Holland willing to sell his goods.

**THE RUSSIANISATION OF DORPAT UNIVERSITY.**—Dorpat University is to be Russianised, so the German papers say. Hitherto most of the Dorpat professors have been Germans, and have given their lectures in their native language. Among them are Professors Dragendorff and Kobelt, both chemists of European fame, and whose works have all been translated into Russian. It is stated that a scheme has been drawn up, under which the University will be completely Russianised within two years. It is hardly credible, though it is freely asserted, that it is contemplated to deprive the present eminent German professors of their posts in favour of native Russian scientists. Such a step could only prove an immense loss to Russia herself, though it certainly seems reasonable to insist that lectures shall be delivered in the language of the nation which pays for them.

**FOREIGN PHARMACISTS IN BELGIUM.**—A foreigner who desires to practise pharmacy in Belgium is now required to pass an examination in the Belgian Pharmacopœia, to hand in his foreign diploma, together with a certificate from the chief medical authority of his country showing that he has been practically engaged in a pharmacy for one year at least, or a certificate to the effect that he has been so engaged in Belgium. Both documents must be countersigned by the official diplomatic representative in Belgium of the foreigner's country. Inquiry is then made into the personal character of the applicant and the reasons which prompt him to establish himself in Belgium. The whole of the papers are then laid before a commission appointed by the Government, who decide whether the applicant shall be allowed to present himself for examination. The Belgian pharmacists are said to be much dissatisfied with these regulations, which came into force on August 1 last, on the ground that they facilitate the establishment of foreign pharmacists in Belgium.

**MEDICINES OR SWEETS?**—A German manufacturer of pharmaceutical specialities complains in the Prague *Rundschau* of the want of method in the application of the Austrian Customs tariff. That tariff, it seems, places a duty of 24fl. per 100 kilos. upon compound pharmaceutical



preparations, and one of 40s. per 100 kilos. upon sweets. The manufacturer has created a sale in Austria for certain specialties of his, such as kola pastilles and essence of tamarinds, which are often prescribed by Austrian doctors. The Customs officers sometimes declare these goods dutiable as pharmaceutical products and sometimes as sweets, justifying the latter classification on the ground that compound articles in which even one ingredient is of an edible character may be so classified. But the strange thing is that, when shown that their classification is altogether arbitrary, they do not deny it, but at the same time refuse to refund the excess duty paid upon the parcels classed as sweets, and refrain from claiming additional payment from those passed under the lower clause. They appear to have nothing else to offer than a continuance of the happy-go-lucky system now followed.

**THE PHARMACY INSPECTIONS IN EGYPT.**—An Egyptian correspondent of the *Pharmaceutical Post* gives particulars of the recently-enacted law which, among other things, provided for the periodical inspection of pharmacies, but which has since been suspended in consequence of the opposition raised by the French diplomatic representative. The origin of the pharmaceutical trouble lay in the new licence-law, the object of which was to divide the taxes more equally between the native agriculturists, out of whose pockets nearly the whole of the taxation of the country is now extracted, and the foreign traders, who, under an old convention with Turkey, as the suzerain of Egypt, enjoy practically freedom from taxation. The new licence-law provided for the establishment of official registers of medical and dental practitioners; it decreed that no one should be allowed to practise medicine or pharmacy who could not show a certificate from an acknowledged authority, and fixed the licence-fees at about 50s. for medical practitioners, while pharmacists were called upon to pay about 36s. for the official endorsement of their diploma, 6l. for the permission to open a business, and an additional 6l. for the permission to deal in poisons. Pharmacists in business were summoned to present their diplomas for endorsement within two months of the date of the decree, under pain of fines, and of eventual closing of their business. The *Pharmaceutical Post* correspondent ascribes the outcry against these regulations principally to the fact that the majority of chemists practising in Egypt are unqualified men of no education whatever. The poisons-law was originally promulgated in 1888, but has always been a dead letter. Besides, the poisons list, drawn up at the time, is ludicrously inaccurate, and includes aniline dyes, and all alkaloids, not excepting quinine, while a considerable amount of friction was caused by the refusal of the Customs offices to deliver imported aniline dye to anyone not in possession of a poisons-licence. The new regulations also established an inspection, to be held at least once a year, of all pharmacies by the sanitary authorities. This part of the law has, in the meantime, been suspended at the instance of the French Minister.

## Pharmaceutical Society of Great Britain.

### NORTH BRITISH BRANCH.

THE executive met at Edinburgh on Thursday, November 19.—Mr. J. L. Ewing, chairman, presiding. There were also present Messrs. Alex. Kinninmont, Glasgow; Alex. Strachan and J. Paterson, Aberdeen; J. H. Fisher, Dunfermline; Charles Kerr, Dundee; James M. Hardie, Dundee; Jas. Watt, Haddington; Thomas Mahen, Hawick; R. McAdam, Glasgow; Adam Gibson and J. B. Stephenson, Edinburgh; and John Nesbit, Portobello. An apology for absence was read from Mr. Peter Boa.

The first business was a report from the General Purposes Committee in regard to increasing the membership of the Society in Scotland. The committee thought that nothing could be done until the by-laws of the Society were passed, but they were of opinion that in the case of a large city like Glasgow, it is desirable that there should be two local secretaries, one for the North and another for the South side of

the River Clyde. The Committee also urged upon all registered chemists in Scotland who have not already done so to join the Pharmaceutical Society. They also considered that important services in this respect could be rendered by local secretaries.

A long discussion followed as to the feasibility of adopting the committee's suggestion. Mr. Kinninmont claimed that in Glasgow the Society was as strong as it was anywhere else. Out of ninety shops he had on the roll some forty members. The chairman said the idea was to follow the London example in having divisional secretaries. Mr. Mahen pointed out that the small towns and villages were the weak point, and ultimately the discussion revolved round this idea. Mr. Nesbit moved—"That, in the opinion of the Executive, a considerable addition ought to be made to the number of local secretaries, and that a committee be appointed to consider what district appointments should be made and to report to the Executive in May." Mr. Mahen seconded this, and stated that on the previous day the Town Clerk of Hawick, had sent him a long letter which he had received from a Mr. G. W. Sargent—(laughter)—asking why he had not taken action against Mr. Mahen for illegally acting as local secretary, and insisting that he should take action at once and have him punished. (Renewed laughter.) Some of the members appeared not to be clear as to whether the Executive had any right to move in the matter of local secretaries at all, but finally the motion was agreed to, the last clauses being altered to read: "That the country should be divided into areas for each of which a local secretary could be appointed."

The nomination of examiners was the next business. The assistant-secretary intimated that Mr. William Gilmour did not seek re-election, whereupon the chairman said that the same applied to Dr. Inglis Clark. He added a few words in reference to the loss which the Society suffered by these resignations, and moved that "the Executive put on record an expression of thanks to them, and high appreciation of their valuable services rendered by them as examiners, and also as members of this Executive." Mr. J. B. Stephenson seconded the motion, which was agreed to. The Executive then agreed to nominate the following gentlemen as examiners for the year 1892:—

David Brown Dott, Edinburgh  
Adam Gibson, Edinburgh  
Alex. Kinninmont, Glasgow  
Thomas Mahen, Hawick

John Nesbit, Portobello  
J. B. Stephenson, Edinburgh  
Peter Boa, Edinburgh  
James Jack, Arbroath

The last two being named for the two vacancies. This was all the business.

### POISONING TRAGEDIES.

#### CARBOLIC CONSOLATION.

Harriet Bowles, aged 23, a young lady staying with her uncle at Norwich, was in low spirits, and drank some carbolic acid from a pewter pot, from the effects of which she never recovered. The jury considered she was in an unsound state of mind.

#### A TEASPOONFUL OF STRYCHNINE.

An inquest was held at Baiden, near Bradford, on Monday, regarding the death of Miss Louisa Wade, aged 18 years. Deceased had kept company with a schoolmaster named Turner for about six months, but Turner wished the engagement broken off, and Miss Turner took, according to Dr. McVic, a teaspoonful of strychnine. Before her death she told her father that she had taken poison.

#### THE MORPHIA HABIT.

Mr. Tannaker Buhicrossan, a Japanese merchant (and proprietor, some years ago, of the Japanese village in London), residing now at Lewisham, had a little daughter named Chiyo, 3½ years of age. The father and an elder daughter, named Nelly, were in the habit of taking morphia, a solution of which was kept in an unlocked secretaire. Little Chiyo had a cold, and stayed at home from school. She was



writing in Japanese on the floor, when she appeared to become drowsy. She was put to bed, and after some time the doctor was sent for. The child died, and the coroner and jury came to the conclusion that the morphia in the unlooked secretaire was the cause of her death. Mr. Buhicrossan said she was the first child he had lost out of fourteen.

#### WEED-KILLER POISONING AT SEVENOAKS.

An inquest was held on Monday, at Riverhead, as to the death of Frederick Whalc, 47, a night-watchman to Earl Amherst. The evidence of Dr. O. Steadman showed that last Friday deceased had gone into an outhouse and found a bottle containing what he thought was beer. He drank about a tablespoonful; immediately after taking it he became sick, and shortly afterwards died. Dr. Steadman said that a tablespoonful of "weed-killer" contained sufficient arsenic to kill half-a-dozen people. The jury added to their verdict a rider, giving their opinion that the "weed-killer" ought to have been kept in a special vessel, with a proper description on it. They also asked the coroner to call the attention of the Pharmaceutical Society to the facility with which the weed-killer could be procured.

#### FOR LOVE.

Elizabeth Ann Jackson, of Newcastle-on-Tyne, had quarrelled with her sweetheart, and died from a draught of carbolic acid. She left a letter asking him to think of her when she was gone, and of the cruel way in which he had treated her. She hoped he would come and see her corpse, and kiss her, and attend the funeral. The *Newcastle Chronicle*, alluding to this case, remarks that the frequency with which carbolic acid is resorted to for purposes of self-destruction, "raises the question whether its value as a disinfectant is sufficient to justify its unrestricted sale to everybody who chooses to ask for it. Of course, we know very well that if a person is determined to put an end to his existence it is impossible to stop him. If he cannot get arsenic he can always get matches. But carbolic acid is a peculiarly dangerous poison, and so many restrictions have already been placed in the way of obtaining less inviting means of quitting the world that we confess we should not be altogether sorry to see carbolic acid scheduled among them."

#### DISPENSING ERROR—STRYCHNINE FOR MORPHIA.

The inquiry relative to the death of Caroline Molland, at Stoke Canon, near Exeter, was resumed on November 21. Deceased was in the habit of taking a solution of morphia mixed with an equal quantity of water, which she procured from Holman & Ham, chemists, Exeter. She had had the prescription renewed, and on taking a dose on the 4th instant she was seized with violent pains, and died in dreadful agony. The inquest was adjourned in order to have the contents of the woman's stomach analysed. At the adjourned inquest Mr. W. Friend appeared for Messrs. Holman & Ham.

Mr. P. T. Rowsell, manager for the firm, said a day or two before Mrs. Molland's death he supplied a carrier with 3 oz. of mixture, being 1½ oz. of solution of morphia and 1½ oz. of water. The prescription was made up by an apprentice. He generally made up the prescriptions himself, and the apprentices had an opportunity of seeing how it was done. There was a mark on the bottle supplied to deceased to show how much morphia should be put into it. A bottle of strychnine was on the same shelf, about 6 inches apart from the morphia, but both were distinctly marked, so that there would be very little chance of anybody making a mistake. The apprentice Hodges was a well-conducted youth, and he had never had occasion to complain of his carelessness.

William John Hodges, the apprentice who made up the prescription, said this was not the first time he had dispensed Mrs. Molland's medicine, but he had previously done it under the supervision of Mr. Rowsell. He had never known more than 3 oz. of the mixture supplied at one time. He was positive he did not take down the strychnine instead of the morphia. It had been a very busy day and he did not wish to call Mr. Rowsell down.

Dr. A. W. Blyth, who had analysed the stomach and the solution, said the bottle contained a solution of strychnine, 2 grains to the ounce. The bottle was an ordinary

6-oz. bottle, with the usual ounce divisions. The exact amount of liquor in the bottle was 4½ oz. The solution of strychnine was practically of the same strength as the solution of morphia said to have been made up by Hodges. From the contents of the stomach he abstracted a very minute portion of strychnine, not more than ⅓ grain. That would not be sufficient to cause death in an adult, but a great portion of it would be absorbed in the tissues. In his opinion this was clearly a case of strychnine-poisoning.

Mr. Friend made a strong appeal on Hodges's behalf, and pointed out that deceased had been in the habit of dealing with other chemists. It was highly probable, he urged, that the mixture supplied by Messrs. Holman & Ham had received some addition. In any case he asked the jury to return a verdict of "Death from misadventure."

The coroner said deceased had been in the habit of taking morphia. Sometimes she obtained it from one chemist and sometimes from another. She appeared to have been supplied under circumstances not altogether satisfactory. It appeared to him that deceased had only to produce money and she was supplied with any quantities according to the sum tendered. The medical evidence pointed to strychnine-poisoning, and it was for the jury to decide whether Hodges was to blame or not. There were several points in his favour.

The jury found that the deceased died by misadventure at the hands of Hodges. The foreman said the jury wished to express censure at the careless manner in which the chemist had dispensed the mixture.

### Personalities.

MR. ARTHUR WELLS, of the Wells Manufacturing Company, Syracuse, N.Y., arrived in Liverpool last Friday by the s.s. *City of Paris*, and is making a short business stay in London.

MR. J. E. JEWELL, from Dr. Hogg's, Avenue des Champs Elysées, Paris, has lately taken over the business of English and foreign chemist, 35 Haymarket, carried on by the late Mr. J. Heppell.

MR. ROBERT ALLEN, M.A., of St. John's College, Cambridge (son of Mr. J. Allen, chemist, Plymouth), has passed in the first division of the final examination for the B.Sc. degree of the London University.

MR. SEPTIMUS VAUGHAN MORGAN, one of the proprietors of this journal, is on a tour round the world. He is now in India, and may be addressed by firms or subscribers, until further notice, Poste Restante, Bombay. For full itinerary, see this Journal, October 3, 1891.

COLONEL CHAS. MUMBY, head of the firm of C. Mumby & Co., mineral water manufacturers to the Queen, of Gosport and Portsmouth, has been made a Justice of the Peace for the county of Hampshire. Colonel Mumby came to Gosport forty-two years ago, and for a long time carried on business as a chemist in High Street.

THE RIGHT HON. W. E. GLADSTONE AND MRS. GLADSTONE are paying a visit on Saturday, November 28, to Spital, Cheshire, to open a recreation-hall in connection with the Sunlight Soap Works of Messrs. Lever Bros. (Limited). They will be the guests on the occasion of Mr. Edward Evans, jun., at his residence, Spital Old Hall, with whom they will lunch. Mr. Evans is chairman of Wirral Liberal Association, as well as president of the Liverpool Liberal Federation, and is one of the partners of Evans, Sons & Co. The Messrs. Lever are also active supporters of the Liberal Party, but Mr. Gladstone's visit will be non-political, and is exciting considerable interest in the district. The Messrs. Levers are also well known as taking a warm interest in the happiness and prosperity of their employes. Spital Old Hall, Mr. Evans's residence, is becoming historical, for it was there that Mr. Parnell stayed when he left Hawarden after his memorable visit to Mr. Gladstone, and on the occasion of his speech at the Liverpool Reform Club.

THE announcement which we made last week, that Mr. W. Gilmour, F.R.S.E., of Edinburgh, had retired from the Board of Examiners for Scotland, will certainly have been received with regret by those who have come in contact with him



And, doubtless, no one more than Mr. Gilmour himself regrets his severance from the board on which he has done so much excellent work for upwards of twenty years. Two years ago Mr. Gilmour was prostrated with a serious illness, which incapacitated him for business for several months; he has never since been quite himself again, and the work of the examination-room, which is exhausting to men in vigorous health, has been rather a severe strain upon him—perhaps retarding that complete recovery which his years and good constitution might entitle him to expect. As the oldest member of the Scotch board, in respect of service, he was the connecting-link between the examiners of the voluntary days—such as William Aitken, D. R. Brown, and William Tait—and those of the present. Yet Mr. Gilmour is still on the bright side of fifty. He was early in harness; indeed, he was a pharmaceutical initiate before he was in



his teens, and after a four-years' apprenticeship with the late Mr. Gavin Steel, Dunfermline, he entered the employment of the late Mr. Lindsay (Lindsay & Shaw), Elm Row, Edinburgh. There he has remained for thirty years—the greater part of that time as a partner, and lately as the sole proprietor of the business. When the Pharmacy Act passed, Mr. Gilmour was taking an active interest in pharmaceutical affairs. Shortly thereafter he was elected to a seat on the Council of the North British Branch, then he became an examiner, and, later, president of the branch. The latter position he filled for several years, and it is not many months since he relinquished his position as chairman of the executive under the new régime. But it is not in his official capacities merely that Mr. Gilmour has done good service for pharmacy. In his early days, as a student of physics, he devoted nearly all his spare time to spectroscopic work, and made many ingenious observations on the application of the spectroscope to the examination of pharmaceutical products. In this connection his observations on the optical properties of fixed oils were early recognised, especially by French chemists, to be of peculiar value. In the more everyday departments of pharmacy he has also done excellent work, and the results of much of it were communicated to *THE CHEMIST AND DRUGGIST*. We may recall his papers on immiscible Gregory's powder, the properties of cotton-seed oil, and one on annual and biennial henbane, which first placed on record the distinguishing characteristics of that important drug. There are many other publications of Mr. Gilmour's which show his skill as a practical pharmacist, and now that he is relieved of the worry of his official appointments we trust he will again resume experimental and literary work. That hope is strengthened by the fact that he is now assisted by his two elder sons, who are ardent in pharmacy, although the eldest is distinguishing himself in the medical school of the Edinburgh University.

## TRADE-MARKS APPLIED FOR.

**THE Trade Marks Journal** publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within one month of the date of this journal give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Lack, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

(From the "Trade Marks Journal," November 4, 1891.)

Picture of sailor standing on globe, and holding flag bearing word "Excelsior"; for a dog-wash and disinfectant fluid. By A. Smith, Excelsior Chemical Works, Clayton, Manchester. 158,264.

"FLORIDA"; for a fruit salinc. By J. Lambert, Medical Hall, Elvet Bridge, Durham. 156,184.

Symbolical design with figure rising above the earth, bearing scroll with words, "Life Worth Living"; for medicines for human use. By H. E. Warren and Louisa S. Jardine, trading as Warren & Co., 44 Trinity Square, Brixton, Surrey. 158,240.

"THE BUXTON RHEUMATIC AND GOUT MIXTURE," with sketch of dispensing establishment, Buxton, and wording on label; for a medicine. By E. J. B. Jones, Royal Dispensing Establishment, Buxton. 158,273.

"CROZALIA"; for pharmaceutical preparations. By the Crozalia Company, 63 High Street, Lewisham, S.E. 158,828.

"ZIRRIZMAH," and other wording; for an anti-inflammatory liniment. By J. T. C. Chatto, 106 Shepherd's Bush Road, London, W. 158,933.

"THE 'DEALES' ALE AND WINE COMPANY"; for mineral and aerated waters. By A. H. Hobson and E. Hobson, trading as the Deales Ale and Wine Company, 9 Victoria Street, London. 157,755.

Sketch of a man sitting on top branch of a tree, holding banner; for aerated waters. By J. R. Wheatley, Dantzic Works, Napier Street, Sheffield. 159,188.

"LILIUM AURATUM CREAM," on circular label; for a toilet cream. By M. M. McMullen, 3 Brnnswick Place, Lower Tottenham, Middlesex. 158,742.

"SNOWDROP," "MERMAID," "MAZEPPA," "SYLVAN," "DYSELEINE"; for chemical substances used in pharmacy and medicine; and "Snowdrop" and "Dyseleise"; for perfumery and toilet articles. By James Dyson & Co., Atlas Works, Elland. 157,796, 157,800, 157,802, 157,805, 158,623, 157,797, 158,625.

"BONNI BELL"; for perfumery and toilet articles. By J. C. Allardice & Co., Bond Street, Belfast. 158,374.

(From the "Trade Marks Journal," November 11, 1891.)

"MURELINE"; for disinfectants. By Mr. Hargreaves, Fylde Road, Preston. 158,867.

"INFALLIBLE," and picture of dead wasp, pierced with arrow; for an insecticide for destroying wasps. By Corry & Co. (Limited), 16 Finsbury Street, E.C. 158,919.

"THE UNIQUE INDIGESTION PILLS," and picture of bird on sea-cliff; for indigestion pills. By E. Cheshire and A. W. Wood, trading as the Unique Indigestion Pill Company, 83 Colmore Row, Birmingham. 158,741.

"THOMAS PUTLAND" as signature; for mineral and aerated waters. By T. Putland, High Street, Tunbridge Wells. 97,629.

Picture of highlandman, and name of firm; for mineral and aerated waters. By William Russell, Banchory, Scotland. 159,339.

"THANATENE"; for perfumery and toilet articles. By J. C. Stone, 9 Dryden Road, Bush Hill Park, Enfield. 158,714.



(From the "Trade Marks Journal," November 18, 1891.)

Picture of man holding three capital R's, and wording on label; for medicines. By J. J. Phillips, Ryecroft Pharmacy, Ashton-under-Lyne. 157,707.

"THE C. & CO. KING OF PILLS," &c.; for pills for human use. By Cousins & Co., 100 Carholme Road, Lincoln. 158,317.

"KALOSIN," and wording on label; for a dyspepsia, indigestion, &c., specific. By H. E. Thompson, 5 Alexandra Buildings, Holderness Road, Hull. 158,486.

"FACE BLEACH," portrait of proprietor, and wording on label; for a toilet preparation and tonic for the skin. By Madame A. Ruppert & Co., 30 East Fourteenth Street, New York, U.S.A. 157,063.

"MYRRH TOOTH SOAP," and other wording on label; for dentrifices and toilet articles. By C. Wright & Co., Detroit, U.S.A. 157,676.

(From the "Trade Marks Journal," November 25, 1891.)

"WILEY'S CHEMICAL ESSENCE," and other wording; for a veterinary medicine for lameness in horses. By F. E. Rookledge, Market Place, Easingwold. 158,452.

"SWEET PINK HEADACHE POWDERS"; for headache powders. By J. W. Cockcroft and J. Duckworth, trading as the Dianthine Company, 51 Northgate, Huddersfield. 158,838.

"G. BANKS"; for mineral and aerated waters. By George Banks, 12, 14, &c., Church Street, Deptford, London. 159,258.

"SANITARY ROSE POWDER," and other wording on label; for a toilet powder. By James Woolley, Sons & Co., 69 Market Street, Manchester. 156,147.

### DEEDS OF ARRANGEMENT.

The following deeds of arrangement with creditors have been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1867. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

**Butterworth, Thomas, & Blackburn Willam**, Ramsbottom, mineral-water manufacturers. Trustee: Ashworth Law, Newchurch, estate agent. Dated, November 12; filed, November 17; unsecured liabilities, 297*l.* 6*s.* 4*d.*; estimated net assets, 200*l.*

	£	s.	d.
Bentham, William, Bacup .. .. .	10	16	0
Bratby & Hinchliffe (Limited), Manchester ..	10	0	0
Bridge, Wm., Manchester .. .. .	29	5	0
Butterworth, A., Ramsbottom .. .. .	25	0	0
Butterworth, E., Ramsbottom .. .. .	25	0	0
Dan Rylands (Limited), B. rnsley .. .. .	44	8	5
Duckworth & Co., Manchester .. .. .	24	19	9
Harroth, P., Ramsbottom .. .. .	10	7	6
Heaton, John, & Co., Ramsbottom .. .. .	16	8	1
Wiltaker, George, Ramsbottom .. .. .	50	0	0

**Cothert, Thomas**, Station Road, Blackburn, and Brookside, Wiltshire, near Blackburn, wholesale druggist. Trustee, Edwin J. Bullough, 1 Richmond Terrace, Blackburn, accountant (with a Committee of Inspection). Dated, November 4; filed, November 16. Unsecured liabilities, 2,902*l.* 7*s.* 7*d.* Estimated net assets, 3,670*l.* 12*s.* 6*d.* Creditors fully secured, 2,367*l.* Assignment of debtor's estate upon trust to realise, with power to trustee to re-assign estate to debtor, providing a composition be paid to creditors of 12*s.* 6*d.* in the pound, by the following instalments, viz.:—£s. at 1 month, 5*s.* at 4 months, and

2*s.* 6*d.* at 7 months from date hereof. The following are scheduled as creditors:—

	£	s.	d.
Acton & Borman, London .. .. .	10	16	8
Addison & Co., Blackburn .. .. .	22	9	8
Anti-Scrub Soap Co., Dewsbury .. .. .	16	5	
Ayrton & Saunders, Liverpool .. .. .	10	15	2
Bailey, S., & Co., Preston .. .. .	21	3	0
Banker's Claims .. .. .	56	18	7
Barriar & Co., Mansfield .. .. .	23	12	7
Berry, W., Manchester .. .. .	10	9	
Bertenshaw & Turner, Manchester .. .. .	21	0	5
Birmingham Vioegar Co., Birmingham .. .. .	32	15	3
Blake & Mackenzie, Liverpool .. .. .	27	12	8
Bleasdale, W., & Co., York .. .. .	67	14	0
Blyton, Astley & Co., Manchester .. .. .	14	5	6
Booth, E. H., & Co., Blackburn .. .. .	15	13	7
Borwick, George, & Sons, London .. .. .	11	16	0
Burton & Son, Ipswich .. .. .	33	17	5
Carswell, John, Manchester .. .. .	12	5	3
Champion & Co. (Limited), Liverpool .. .. .	17	3	5
Clay, Dod & Co., Liverpool .. .. .	135	14	3
Colman, J. & J., London .. .. .	37	4	0
Cawson & Son, Blackburn .. .. .	26	0	0
Day, E., & Co., Manchester .. .. .	13	5	0
Duerden, R. J., Blackburn .. .. .	11	16	6
Evans, Sons & Co., Liverpool .. .. .	54	0	1
Gibson, James, Liverpool .. .. .	32	13	9
Gibson, Robert, & Sons, Manchester .. .. .	49	1	0
Harker, Stagg & Morgan, London .. .. .	28	11	5
Hedley, Gamble & Crossfield, Liverpool .. .. .	10	14	9
Hockin, Wilson & Co., Manchester .. .. .	48	16	4
Holmes, Bailey, Hull .. .. .	11	10	2
Horsley, A., & Co., London .. .. .	67	7	0
Houlker, E., Blackburn .. .. .	13	18	0
Hudson, R. S., Liverpool .. .. .	10	8	0
Jackson, W. & H., Liverpool .. .. .	44	8	6
Jenson, James, Preston .. .. .	42	16	5
Johnson, John, & Co., Liverpool .. .. .	31	7	3
Kemp, W., & Son, Horncastle .. .. .	16	4	1
Kerfoot, Thomas, Manchester .. .. .	76	16	0
Leaver, J. & S., Blackburn .. .. .	20	0	0
Lewis, John, Blackburn .. .. .	17	8	6
Mackay, G. G., Liverpool .. .. .	18	19	0
Maguire, G. A., Blackburn .. .. .	100	0	0
Marshall & Dent, Blackburn .. .. .	21	10	6
Metcalf, John, Accrington .. .. .	17	10	0
Mitchell, M., & Co., Bolton .. .. .	18	2	0
Morgan, W. J., & Co., Manchester .. .. .	12	0	0
Morris & Callard, Aumanford .. .. .	21	5	6
Oldfield, Pattinson, & Co., Manchester .. .. .	100	7	4
Panter, Woodward, & Co., Bristol .. .. .	27	7	9
Pantlin, W., & Co., London .. .. .	28	0	0
Parsons, John, & Co., Manchester .. .. .	15	2	0
Passe, Ralph, Ponton-le-Fylde .. .. .	22	11	1
Potter & Clarke, London .. .. .	14	0	6
Rawstorn, G. & J., Hull .. .. .	150	1	0
Reckitt & Sons (Limited), Hull .. .. .	13	6	3
Robinson & Sons, Chesterfield .. .. .	57	16	4
Ronaldson & Co., London .. .. .	13	0	9
Sagar, J. & M., Blackburn .. .. .	43	19	7
Smith, Robert, Longridge .. .. .	200	0	0
Speck, James, & Co., Leeds .. .. .	16	13	4
Stephenson, Mager & Co., London .. .. .	21	17	6
Storry, Smithson & Co., Hull .. .. .	24	12	9
Storry, Witry & Co. (Limited), Hull .. .. .	21	15	10
Teasdale, J., & Co., Carlisle .. .. .	11	2	6
Thompson, J., & Sons, Hull .. .. .	11	16	11
Tingley & Son, Darwen .. .. .	16	14	0
Tomlinson, T., & Son, Manchester .. .. .	40	0	0
Tyson, Richmond & Jones, Liverpool .. .. .	13	0	6
Vickers, G. W., Blackburn .. .. .	12	9	6
Washington, Son & Co., Manchester .. .. .	32	1	0
Wilkinson, Josiah, & Son, Hull .. .. .	10	2	5
Wilton, George, Son & Co. (Limited), Doncaster ..	14	15	0
Wood & Walwright, Hull .. .. .	22	2	2
Wright, Crossley & Co., Liverpool .. .. .	22	17	1
Wylie & Co., London .. .. .	25	2	6
Wyleys & Co. (Limited), Coventry .. .. .	32	14	10

"Good morning, Mrs. Gilligan; how is Patrick this morning?" "He's no better, sir!" "Why don't you send him to the hospital to be treated?" "To be treated, is it? Faith an' it's the delirium trimmins he has already."





IT needed a more imaginative man than Our Town Traveller to realise that we are within a month of Christmas, when he stepped on board one of the Victoria Steamboat Company's little vessels last Friday morning; the sun was bright, the air balmy, and the sound of hammers rang clearly from the new Tower Bridge. He was on the way to

#### CHAS. SOUTHWELL & CO.'S CONFECTIONERY WORKS,

and when he got there Christmas was all around him. While resting in the office, for example, he picked up one or two seasonable price-lists—"the latest novelties in bonbons, crackers, &c." A lot of nice things they have in that line; things that will make children crazy with delight—magical, musical, and pictorial crackers. Some to amuse older children too, and a variety of dainties in the confectionery line which wanted only snow and holly to complete the illusion. Such a business as Messrs. Southwell & Co.'s varies greatly with the seasons, for although the manufacture of their table-jellies, comfits, lozenges, and the like goes along steadily, the preserve-business differs in kind from month to month. At present candied peel and marmalades are the leading items. When our traveller called and saw the nature of the work which is done day by day in the firm's chemical laboratory—such as the examination of fruits, sugars, and the manufactured products, much of this work being the determination of the percentage of invert sugar in preserves and the possible prevention of its reaching a deleterious amount—he became so interested that he asked Mr. H. H. Robins, the analyst, to conduct him over the works. The walk round occupied two hours, and our representative is sure that he did not see everything. In less than six years the firm have made their works at Dockhead one of the largest factories in the district, and an important one too. But it is the candied peel which must occupy our attention now. One is apt to think that the candying of lemon, orange, or citron peel is a very simple thing. First get your peel, dip it in a strong syrup, dry, and there you are. Not so. It is a lengthy and very delicate process. The peel is saturated right through with sugar, and before that can be done it must be prepared and coaxed to take in the saccharine fluid. The first thing is to cut the fruit in halves. For this an ingenious machine is employed: it is like a large lemon-squeezer and root-cutter in one; the knife cuts, simultaneously the juice is squeezed out without injuring the peel, and, when the handle is raised by the operator, the plate on which the fruit is lying rises and throws it into a basket. The fruit is now placed in brine, where it remains for a long period, and when wanted it is cooked—which is, perhaps, the most delicate part of the whole process, as the slightest degree of overheating might fracture the oil-cells, and it is a peculiarity of candied peel that, in spite of all the maceration and heating it goes through, the aroma of the fresh peel is retained. This, Mr. Robins believes, is on account of the oil-cells remaining intact. After the pulp is removed the peel passes through several plain waters (technically termed "freshened"), and is then gradually saturated with sugar by successive syrups of different strengths. It has yet to be candied, but it is generally stored away before this is done, as the slightest degree of damp (for instance, that adhering to paper or boxes) makes the peel hazy. The last dip of sugar is, therefore, reserved until the last moment, and then we should get a translucent peel. It is unnecessary to speak of all that the peel goes through after this—such as picking, sorting, and packing; but any chemist who knows what a trouble syrups are will, from what we have said, appreciate the care and skill which must be bestowed

on candied peel before it can be produced in the style that Messrs. Southwell & Co. produce it. There is another branch of the peel-business which the firm undertake—that is, medicinal orange and lemon peel—but it is the month of January before that comes on. We hope to give some account of it this season. "What becomes of all the juice?" asked our representative of his guide. "Some of the lemon-juice, of which we produce some 30,000 gallons each season, we sell to wholesale druggists and citric-acid makers; and a large proportion is used in the manufacture of various summer drinks. We also bottle several thousand gallons for sale as 'pure lemon-juice.'" By-and-by the barrels of juice were seen. Mr. Robins explained that the juice clears itself. On standing it undergoes fermentation, and becomes quite clear, only the "foots" requiring filtration. The opalescent juice is unfermented, but there is little demand for it. Preserved ginger is another department of the firm's business. This they import in barrels from the East and West Indies and China. Most of it goes through a process similar to peel before it is turned out as candied ginger.

#### S. MAW, SON & THOMPSON.

The chemist who wants to select a varied assortment of goods suitable for sale as Christmas presents, can find abundant stores in the well-stocked rooms at 11 Aldersgate Street. Our Traveller, who went on the search for Christmas novelties, avoided the instrument department this time, but got himself conducted round the glass, sundry, and perfumery stocks. There was no special exhibition of Christmas presents on show, but suitable articles were to be met with on every hand. A regiment of odorators, in twenty or more different designs, costing from about 2s. to 10s. each, made a very pretty show. Leather desk-shaped cases, silk lined, containing a pair of brushes, a comb, a mirror, and a glove-stretcher, all deftly fitted in, would prove an acceptable present anywhere. These come very costly in ivory, but they are made to look very nice in xylonite, and our Traveller was told that ebony is now all the rage, and nothing can look much richer than brushes made with this material and bearing a silver monogram on the back. Such brushes are not dear. A case such as we have mentioned could be sold retail at 50s. with a respectable profit. Cut toilet-bottles, in various shapes, and "Tantalus" perfume-cases were also pointed out to us as favourite presentation articles. Among smelling-bottles there seems to be a further development of the monster cut bottle. The latest styles are 3 or 4 inches high, 2 inches across the mouth, splendidly cut, and mounted with a heavy silver band. These sell at somewhere about 17s. each, more or less. Very elegant looks the caseful of silver smelling-bottles. The bottles are encased in chased silver and enclosed in jewellery-cases. Chemists who sell these would require to hold a plate-licence (24. 6s. per annum). We understand that the firm could supply a fairly satisfactory assortment of such bottles for 47s. or 57s. A pretty novelty just being introduced is a Japanese chest-protector. These are made of stuffed silk, bearing hand-embroidered floral designs, and are very pretty. They would have to sell at from 4s. to 10s. each by the retailer. "Nileseo" is the title of another ladies' novelty. It is a soft chamois-leather handkerchief, tastefully embroidered, or made into a small parcel for the pocket or bag. Actresses, we are told, and other ladies preserve a "healthy and cheerful bloom" on their delicate cheeks by the application of these handkerchiefs. They use them like puffs. Among perfumery goods Messrs. Maw are putting up elegant half-guinea cases containing each three new-shaped large bottles of choice perfumes. They are agents for some French perfumes somewhat similarly, but more fantastically, got up. They have pretty straw caskets, with a large cake of savon de luxe. They also make toilet-packages, in which are packed soap, tooth-paste, tooth-brush, and cosmetic. Pretty counter leatherette cases contain sixpenny or shilling sachets, while other sachets, very richly perfumed, manufactured by Reger & Gallet, are to sell at 1s. 6d. each. The silk-bag sachets, in glass-topped boxes, have a very showy effect. Our Traveller was also shown some novelties in feeding-bottles, the description of which we may reserve for a week or two.

In the course of our Traveller's walk round Messrs. Maw's showrooms he took note of two novelties, both of which have been introduced to chemists through our advertisement pages. One is a new form of porcelain graduated medicine-



spoon, which offers facilities for measuring and for administering medicines. It is made to stand level on a table



so that the measurement can be accurately performed, and it is in many cases more convenient for giving medicine in than a glass.

The other little instrument is a new form of inhaler. It is constructed of glass with a glass mouth-piece at one end



and an indiarubber double-teat attachment at the other end, for inhalation through the nostrils. The instrument is filled with cotton-wool, which is saturated with the inhalant. It is supplied either charged with menthol, or with plain cotton-wool for the addition of pine oil, terebene, or other substance.

PERKEN, SON & RAYMENT.

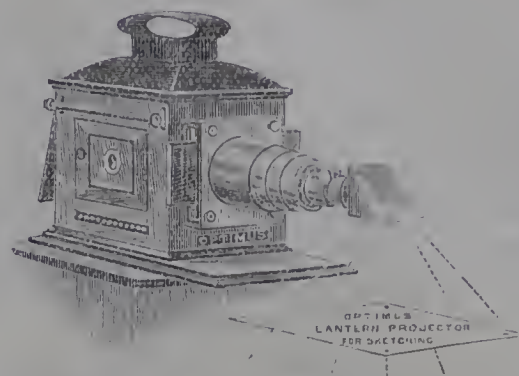
"Never had such a season before," said the head of the firm in answer to our inquiry how the magic-lantern business was thriving. "Yes, most orders for the new season are now in hand, and our men are very busy executing them." "You see," continued the chief, waving his hand in the direction of a huge table at the back of the showroom, where magic-lanterns pointed their now inanimate lenses in every direction, "we use what spare moments we get during the summer to prepare a stock of these lanterns. At the beginning of the lecturing and entertainment season we always manage to have a sufficient supply on hand to withstand the first shock of customers. How many lanterns do we sell? Well, if I told you the number you would probably think that I was romancing, but let me tell you that our sale has not been so large in any previous season. The demand has been good all the year through, and we have been forced to begin the winter with only about one-eighth of our usual reserve stock."

"I ascribe the demand partly to the enormous increase in the habit of illustrating public lectures with lime-light views. Few lecturers, nowadays, care to face their audience for an hour's talk without giving them something else to look at than the chairman behind a water-bottle." "Quite true," thought our representative mentally reviewing his experience of many meetings of learned societies and political organisations enlivened by the magic-lantern, and calling to mind the popular, if irreverent, comedian's song at the Gaiety about a certain "Randy, oh!" who,

When he's back will not refuse,  
If paid in a proper manner,  
A lecturing tour with limelight views,  
And somebody's grand planner.

"See here," continued the chief, interrupting these musings—"this is a new idea of ours which is taking well. It consists in the application to the lens of the lantern of a small triangular box provided, inside, with a glass under its slanting surface. The rays of light are thereby thrown upon a sheet placed immediately below the projector, rendering it infinitely easier to trace a model one desires to copy from a slide than it would be to sketch it from a vertical position on a screen. The size of the figure depends of course upon the distance between the projector and the table upon which the image is projected. For the convenience of our customers, we supply movable stands upon which the lantern may be lowered or raised at convenience.

The projector is very easily detachable. The application of this idea to the magic-lantern is quite new, although it has been made use of before now in connection with the microscope. By the way, it will interest your subscribers to hear



that we now make all our lanterns with 2-inch instead of 1½-inch wicks. That ensures a great improvement in the clearness of the image upon the screen; and we have not raised our prices at all."

"Here is something new in the photographic line. This cabinet is made to hold twenty-four large-size photographs, and by turning the glass knob at the end you can keep them appearing in regular succession as long as you like." Whereupon, without formality, Her Majesty disappeared into the depths of the box, to be succeeded by H.R.H. Then a brief interregnum of the Houses of Terry, Dunlop, and Melba. After which the House of Hanover came to its own again, in the person of one of its scions, vulgarly known as "Collar-and-Cuffs." Inside the box are two lots of superposed frames, each numbering twelve. The topmost frame to the left contains the photograph exposed to view. If you want to change it, you give the handle a turn, a small wooden bar grips the corresponding frame to the right, brings it forward, and places it over number one. And so the succession proceeds, upon the principle of the pig that wouldn't go (but ultimately went) over the style.

Then we came to talk about the magic-lanterns again. Like the mysterious disease that is coming upon us (*vide* advertisements), amateur photography is fast spreading into an epidemic, and the ubiquitous amateur, no longer content to regale the family circle upon the trophies of his raids on the peaceful country-side, in the shape of album views, has lately taken to inflict his photographic scalps upon a wider range of acquaintances by inviting them to assist at their reproduction by means of a magic-lantern, while he dilates upon their excellence with a pride as of Mr. Pecksniff, pointing to his pupils' sketches of "Salisbury Cathedral from the North, from the South, from the W.N.W.," and so on, boxing the compass. This new ex-crescence of the photographic mania brings grist to Mr. Perken's mill, and he therefore speaks sympathetically of its symptoms. He has still another novelty. Here it is—



simpler than its name, the "Optimus Patent Lever Lift Carrier Block."

Is there a man with soul so dead who has assisted at magic-lantern entertainments without ever experiencing pangs of pity for the ineffective efforts of a nervous operator to keep up a smooth succession of slides? Is there one who can behold with indifference the incurable tendency of some picture, meant to illustrate a grave or tragic scene, the contemplation of which should have lifted the minds of the audience to nobler thoughts, to bob up and down in hysteric spasms, or to present the gory tyrant and the youthful hero engaged in mortal combat standing upon their heads? We

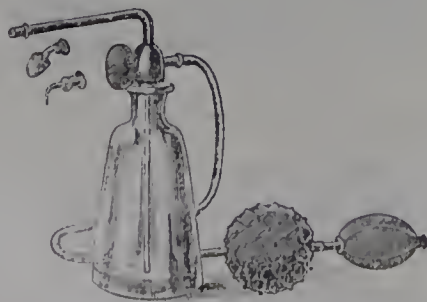


all remember Artemus Ward's troubles with his moon that used to go on strike at the critical moment, and the liberal endowments with which the humourist proposed to reward any competent moonist in search of employment. For such evils Mr. Perken has as yet found no cure. But very, very often the perspiration of the nervous operator's thumb and digit, as he jerks at the slide to get it into its place, while the audience is on tiptoe of expectancy, will deposit itself upon the slide. Then, maybe, in the fierce light that beats upon a magio-lantern screen, the deposit reappears in the guise of an enormous eruption of vulgar blotches upon the serene visage of the Bishop of Rum-ti-foo holding forth to his sable flock, causing the schoolboy to guffaw aloud and the bashful maiden to titter audibly. These troubles may be averted by the use of the O.P.L.L.C.B. You press the lever-pin, and the slide jumps up between the fingers in such a way that the edges of the glass only need come into contact with the flesh. There is room for two slides in the block.

#### H. GILBERTSON & SONS.

This firm have always enjoyed a reputation for their cut-glass bottles, and as a nice ornamental scent-bottle still maintains its high rank among the tokens of affection with which people are accustomed to present their friends at this season, our Town Traveller gave them a call, to see if there were any new notions in the glass-bottle line. He found a fine show of novelties in their showrooms, and was especially asked to observe the clear cut of the patterns, and the exact fitting of the glass stopper, which, to judge by their prices, he would not otherwise have pronounced "English cut." Sixteen men are kept constantly at work cutting bottles for the firm, and we can affirm that the specimens of their work submitted to us left nothing to be desired in point of finish. There are no absolutely new shapes this season. The pyramid bottle is as much in favour as ever, and there is a nice basket-shaped bottle, for which our guide told us he was trying to find a name. Turning to small pocket smelling-bottles, of which a basketful of samples, fresh from the factory, had just been brought in, we found some very handsome star and diamond models at from 24s. to 36s. per dozen. For bottles with ruby patterns there is always a good demand. In one of their showcases Messrs. Gilbertson keep some of these bottles as they import them—quite plain, or, to use the technical term, in metal form. The difference in weight between the uncut and the finished bottles is enormous, and gives an indication of the loss in material involved in the cutting operation. The ruby bottles are made throughout of plain glass steeped in a ruby-coloured solution after moulding. When the bottles are cut, the white glass of course reappears, leaving only a slight coloured design here and there, the whole producing a very pretty effect. It is singular that, except the ruby colour, no other shade has ever succeeded in gaining the favour of the cut-bottle-buying public. The spray perfume bottles, with piston action, still sell well, as they have been doing for some time. Neater in shape, though by no means novel, is the small bottle which, our guide assured us, is the kind used by the Queen, who "will use no other." That bottle has a soft indiarubber bulb fixed over the stopper, while both air-inlet and spray-cast are small thin glass tubes, the apertures of which are placed quite close together.

A new syringe for surgical purposes is being placed upon the market by Messrs. Gilbertson this week. It can be



regulated with a screw so that the operator may first fill the air-reservoir, and, later on, by turning the screw near the mouthpiece, produce a fine spray of sufficiently long duration

to enable the eye, the larynx, or other affected part to be beneficially acted upon.

"Ammoniated globular lavender salts" is the name given to a new smelling-bottle brought out by the firm. The "salts" are in large globules. Our Traveller unearthed the secret, but wild horses will not drag it out of him. He was told that the demand for the article is exceedingly brisk, and that several of the firm's competitors had been racking their brains to find out where to obtain a carbonate of ammonia in ball-form at a price which would enable them to compete with this low-priced article. They do not seem to have found the solution of the puzzle yet. Another good toilet novelty he was shown is "Pumice Foam." This is pumice-stone in pieces like large pebbles, wonderfully light and smooth, and we are assured that it occurs naturally in this shape.

#### HENRY C. QUELCH.

"What I wanted to show you," said Mr. Quelch, when our Traveller called on him, "was this new line of Lazell's sachets. You know the half-crown one? This is it." We have on a previous occasion described this sachet. Got up in beautifully embossed paper envelopes, with the name of the scent in raised and coloured script letters from corner to corner, these sachets have taken so well in select circles that Mr. Quelch has induced Lazell, Dalley & Co. to put up 6d. and 1s. sachets of the same flavours. This they have done, and they are ready for Christmas. They are not so richly elegant as the dearer line, but they are pretty and sweet. For this season's trade Mr. Quelch has done something to encourage chemists to put up perfumes in good style, having introduced fancy cardboard cases, the front of which, as well as the lid, is hinged, and in each case is a stoppered cut-glass bottle. Some of the cases are for two bottles. This is a good idea for the Christmas trade. The boxes are varied in style, and not at all cheap-looking, although made of cardboard. They are just the thing that many chemists want, as, while providing the means of placing a high-class article before customers, they do not unnecessarily burden the retailer should trade miss fire. Another pretty line of goods which Mr. Quelch is introducing is a series of sachets and packet puffs in oriental embroidery-work. The embroidery is done under the direction of a French lady resident in London, and the way in which plain muslin and silk and satin are combined with tinsel and silk-stitch is very effective. These should be popular, and they are stylish enough to get any price for them.

#### SHIRLEY BROTHERS.

It is a crowded place that Messrs. A. W. and Stephen Shirley now have at Farringdon Road, the menthol-cone and feeding-bottle departments being well supported by other sundries, of which perfumes are the heaviest line. What the firm aim at is a middle-class trade. They began with 1d. tubes of perfumes, and have gradually developed until they now supply several metropolitan sundries-houses with bottled perfumes. For the Christmas trade we noted in their show-room a neat hexagonal box, which opens up, disclosing three bottles, kept in position by a floral band. The lot retails at 2s., and the bottles are cut-glass and stoppered! Each bottle contains about 3 drachms of triple essence—"unwatered," Mr. A. W. S. impresses on our representative. "Another good line—Lundborg style of bottle, stoppered, capped, capacity about 1 oz., that retails at 1s., and we put the chemist's own name on the labels if they order 3 doz. Most of them do." So Mr. Shirley went on. He has other attractive and saleable lines in stock, notably a 3d. bottle (tabloid-bottle shape), with lip and sprinkler. It seems a marvel, for the same quality of perfume is used for all prices. Our representative's attention was also called to the latest thing in Preston-salt bottles, an imitation of Worcester china, with cork stoppers. These are made in ordinary Preston shape and globular. The "mark of the beast" is upon them—"German make"; but they look well, and are cheap. A pretty embossed scent-flask, with sprinkler, made to imitate oxidised silver, is taking very well, and it is difficult to get enough of them forward. There are some other novelties in perfume flasks and bottles for the toilet-table, the tastiest which our representative saw being made of Venetian glass. These could be filled with perfume and retailed at a price which would make one a handsome Christmas gift. Mr. Shirley reports business to be good just



now, and Christmas goods are selling very rapidly. Of the general business he reports an increase in the menthol-cone trade, but this is owing more to manufacture getting concentrated into a few hands than to increased popularity. Since his firm have taken to doing their own wood-turning for cone-cases they have developed a little in that branch, and now manufacture puff-boxes, with tartan and floral decorations, which are well suited for middle-class trade.

#### G. VOGT & Co.

told our representative that the newest thing they have for Christmas is one of their old-fashioned scents. That seems an anachronism, but our Traveller solemnly declares that "The Scent of an Old Garden" is not. Messrs. G. Vogt & Co. have taken us to the moorlands and hayfields before, but in their floral excursions they have not touched anything so memory-searching and delightful as this "Scent of an Old Garden." It has a pretty label—a little Marcus Stone-y in character; indeed, it has been designed by a Royal Academy man—which also appeals to the fancy.



IN the Court of Session, Edinburgh, on Tuesday, an application was made before Lord Low to restrain a Mr.

Max Gregor, carrying on business in Glasgow, from advertising or offering for sale certain articles which might be taken for Sequah's oil and prairie flower.

Mr. Sym, for the complainers, Sequah Company (Limited), said the firm dealt in two substances known as "Sequah's Oil" and "Sequah's Prairie Flower," and the defendant sold what he called "Squaw's Oil" and "Squaw's Indian Medicine." The company's trade-marks had been almost copied, and the word and sound "Squaw" and the general appearance of the packages were also calculated to mislead purchasers. Their registered trade-mark was the fancy word "Sequah." That gave them a *prima-facie* right to the exclusive use of that word, and to interdict people from using words practically synonymous with it. Counsel proceeded to quote cases to show that no one could adopt a name for the same kind of article which had a similarity, as in the case of the Slazenger "Demon" tennis-racquet, where an imitator selected "Demotic," whatever that might mean. The respondent did not even own that he had a trade-mark registered.

Lord Low: If he had a trade-mark registered it might be necessary for you to take proceedings to have it expunged from the register.

Mr. Sym: Yes, if he tried to get one registered; but that was not the state of matters. Obviously an attempt had been made to get hold of the essential word, and in a city where they spoke quickly there was no difference between the two words "Sequah" and "Squaw."

Mr. Max Gregor, who appeared for himself at the bar, said this was an action raised by a wealthy company with a capital, it was said, of 300,000*l.*, against a man carrying on business in a humble way. The object was simply to procure an advertisement, for probably the company, like Mrs. Allen and Beecham, spent 40,000*l.* a year for advertising. Sequah had been only registered for three years and a half; now it required five years before protection could be secured. The only thing registered was a trade-mark or device. His best answer to the complaint was the usages of trade. Here he produced in court a great collection of articles by

different makers, to show how, in the making up of the packages, they were almost identical. Amid some amusement Mr. Max Gregor went on to say he had not imitated Sequah. If he had to do so he would have to start a caravan with four horses, engage a band and a lot of cow-boys, and all the ragtag-and-bobtail. His medicines were sold in his confectionery premises, and by placards he pointed out it was not Sequah's medicine. In fact, he might tell the court that it was Sequah's custom to rival all petty vendors. At one time there were thirty men in possession of this Indian medicine, and now they were all travelling the country under the name of "Sequah." But he would not take such action. Possibly, if he had been an Irishman or a Yankee he might have done so, but he had too much of the Scotsman about him to make a mountebank of himself. (Laughter.) Bass's labels, he said, were closely imitated by brewers; and if Sequah had been in Bass's place he would have wanted to monopolise the sale of beer over the three kingdoms. Just to show his lordship what kind of man this complainer was—(laughter)—he could tell him that when in Glasgow he saw fit to make a demonstration before his door, and he (the respondent) had to seek the protection of the police. He then had a bill printed with the words, "Sequah squashed by the Squaw Indian medicine." (Great laughter.) What benefit could he have in imitating a quack?

Lord Low said, if the respondent seemed so anxious not to be mistaken for Sequah, why did he not take care not to imitate the packages? The two parcels were as like as they could be.

Mr. Max Gregor said it was necessary they should all be nearly alike, being for the same purpose.

Lord Low said the complainers should prove an act of injury—that someone had bought the thing complained of in the belief that it was Sequah.

Mr. Sym said they had complaints from druggists' shops.

Lord Low could not understand that if Mr. Max Gregor was so anxious not to be confused with Sequah why he had got up his medicine so much in the same way.

Mr. Max Gregor: It is honorable competition.

Lord Low: You have selected the likeliest word to be found in the English language to the distinguishing word by which they sell their Sequah. The only doubt was whether to have a proof as to some facts. He had not the slightest doubt that Sequah was first in the field, and had established the business known to the public as sellers of Sequah. But he would consider the matter as to whether any further inquiry should be proved in evidence.

#### HALL v. THE SOVEREIGN CHEMICAL WORKS (LIMITED).

IN the Chancery Division on Saturday, Mr. Rowden appeared in support of an application in the case of Hall v. The Sovereign Chemical Works (Limited). The learned counsel stated that this was a debenture-holder's action, and came on for judgment in default of defence. Under the terms of debentures the principal became due when the interest was two months in arrear. That event had happened, and the principal was now payable. Mr. Justice North, by order of July 3 last, appointed a receiver and manager, and he was now in possession of the undertaking. What was now asked for was a declaration and an account of what was due to the plaintiff and other debenture-holders. His lordship made the order asked for, and continued the appointment of the receiver as manager for six months, with liberty to apply in chambers.

To prevent the decomposition of carbonate of ammonia. *Phar. Zeit. f. Russ.* recommends that a small quantity of ammonia solution should be put into the jars.

MR. HOLLOWAY'S WILL.—The Court of Common Council have referred to their Law Committee the petition of Mr. Thomas Hutchins, nephew of Thomas Holloway, who asks the court to investigate the disposition of the late Mr. Holloway's estate, with a view of disputing the latest will. The City's concern in the matter is that by earlier wills Mr. Holloway had bequeathed large sums in the trust of the Corporation.



## MODERN PHARMACIES.

If chemists will assist and encourage us we shall from time to time, as space admits, publish sketches of such new or newly-fitted pharmacies as seem to present features of interest. Our object will be simply to gather ideas. We do not wish to advertise anybody or anything, but we have no objection to doing this if it becomes necessary in the course of our descriptions.

On this occasion we present three sketches of recently fitted pharmacies in different parts of the country.

The shop sketched below is the branch establishment of Messrs. Wilson & Son, in James Street, Harrogate. The distinguishing features of the front are the introduction of highly-finished stained-glass panels which bear various cabalistic signs of ancient alchemy, and the fact that the windows have bent-glass ends which give an air of lightness and afford the utmost show-space. From the stocked appearance of the window it will be seen that Messrs. Wilson have a prejudice against coloured carboys and ornate jars, finding that the space they occupy can be more profitably



filled. This, at any rate, is their experience in a fashionable watering-place. The entrance is on a level with the street, and the interior is stylishly fitted in mahogany with a fair amount of carved work, a mosaic-tiled floor, and everywhere around a "stocky" appearance. A pinnacle of syphons here—as might be expected, Mr. J. H. Wilson being the northern director of the "Canwal" Co-op.—a tower of medicated wines there, for the legend "licensed to be drunk off the premises" is discernible in small letters over the door.

Close to the manager's desk is the telephone, a private wire running to the head pharmacy in West Park, so that constant communication with the principal is obtained.

A nickelled weighing and measuring machine (no aggravating penny—quite free) and wicker baskets of sponges at popular prices occupy some of the floor-space, whilst the specialties of the firm—"The Harrogate Bouquet" (which does not smell of sulphur-water), "The Harrogate Sulphur Soap" (nor does this), and an Eiffel tower of corn-paint—are exhibited prominently. Attached to the latter is a curiosity of which the firm are proud—namely, an envelope bearing the inscription—

THE CHEMISTS,  
Harrogate

—which an astute (at least W. & Son think he was) P.O. man had endorsed, "Try Wilson." It was an order for corn-paint. Possibly the most noticeable feature of this elegant

bijou pharmacy is the taste displayed in the arrangement and the finish and style of all labels and tickets, for Mr. J. H. Wilson is a "dab" hand at letter-cutting and printing, and is frequently asked as a favour by tradesmen rusticating at Harrogate, "Where he gets them."

The Firs Pharmacy, Bournemouth, of which Mr. G. E. Bridge is the proprietor, is a very imposing-looking establishment, built and fitted in a style the cost of which can only be justified in such pharmaceutical paradises as the popular and prosperous southern watering-place. The external appearance of the Firs Pharmacy, with its spacious window-frontage, is represented in our sketch. Within, the



equipment is in accord with the handsome outer effect. The fittings are entirely of Spanish mahogany with fine ebony mouldings, and the counter-display is contained in glass show-cases, while one exceptionally handsome semicircular case divides the dispensing department from the shop generally. Mr. Bridge has made a particular feature of the surgical-appliance department, and his stock of all such goods as belts, bandages, air and water beds and cushions, batteries, crutches, invalid necessities, ice-bags, antiseptic appliances, stethoscopes, &c., is noteworthy, and naturally brings the numerous medical practitioners of the district to his establishment. Mr. Bridge has just constructed a new fitting-room for this department of his business at a cost of 460*l.*, and he has lately been appointed surgical-appliance maker to the Royal Victoria Hospital at Bournemouth. By means of a Woakes's transformer he is able to convert the electric current from the local electric-lighting power to all medical and surgical purposes, especially for charging accumulator cells for the practice of the electric cautery. Many of the minor repairs of surgeons' instruments are done on the premises. Mr. Bridge made a good show of this class of goods at the British Medical Association meeting at Bournemouth last summer, and tells us his exhibition resulted in a considerable increase of business. In regard to dispensing he says that the competition has been very severe in Bournemouth, but he thinks the public are getting a little tired of cutting in this department. At any rate, he says, old customers who have left him are coming back with the marks of the cutters on their prescriptions, and they certainly do not come to him with the idea of financial gain.

The handsome building shown in the sketch on the opposite page is a view of the pharmacy erected in the early part of this year by Mr. Joseph Roberts in the Bigg Market, Newcastle. It is located in the very centre of the city, quite close to the principal public buildings, and is known as Roberts's Colonial Pharmacy and Drug Warehouse. Prior to the purchase by Mr. Roberts, who is sole proprietor of both building and business, the former was occupied (and was specially constructed for the purpose) as a corn-factor's emporium. Needless to remark, therefore, it is of the most substantial character, the timbering of the several floors being of extraordinary solidity—indeed, Mr. John Curtis (member of the well-known firm of Leeds shop-fitters) assured Mr. Roberts that in the course of a long experience his men had never "put saw" in floors so splendidly



timbered. The front of the building, as reconstructed for Mr. Roberts, is of dressed Ashlar stone, relieved by moulded cornice, corbels, chamfered jambs, and rusticated quoins all of stone and of exceptional design and elegance. The sides and ceiling of the commodious portico, or entrance, are fitted with panelled framing of choice paduka-wood with finest silvered plate-glass, introduced to screen the inner portions of the massive stone pilasters. The size of this portico, or lobby entrance, is approximately 6 feet by 5 feet 6 inches. In the centre of the floor of this entrance is fitted one of Hayward Bros.' prismatic reflectors, admitting light to the basement. This is surrounded by a mosaic border of chaste design. A handsome door separates the lobby from the shop, and the framework is so constructed that the already spacious entrance can be still further widened when required. The fanlight and transoms above the door are fitted with bevelled plate glass in small squares, and the ceiling of the portico has an ornamental mirrored octagonal panel from which is suspended a duplex electric light in cut glass.

The window consists of one massive sheet of plate glass enclosed in a neat polished paduka-wood frame resting upon a sill of finest red granite with "J. Roberts" in raised brass letters affixed thereon. The stall-board lights beneath the window are again Hayward Bros.' prismatic patent (with ventilators in this instance), the interior splayed and lined with white glazed tiles to further light the spacious basement.

The window-screen is in the form of a balustrade with central panel and pediment—all of the best mahogany. It was the production of Mr. Ralph Hedley, a well-known north-country artist and wood-carver, some of whose pictures have been exhibited in the Royal Academy in recent years. The architect was Mr. J. W. Taylor, of Newcastle, and the photograph from which our sketch is taken was by Mr. Lyd Sawyer, of Newcastle.

The electric light is employed both within and without. The lamp shown in the drawing is an arc light of 2,000-candle power.

The interior of Mr. Roberts's establishment is very striking and original. The ceiling of the shop is artistically panelled into three bays, each of which has been treated by means of fibrous-plaster slabs relieved in handsome mouldings and cornices. The wall-fixtures comprise on one side about 18 feet of plate-glass cases, with drawers beneath, and on the other some 25 feet of open shelving, with solid wood backs and cupboards beneath. At the back of the shop is

a private office, the separating screen of which forms a handsome showcase, some 7 feet high. In these respects the pharmacy follows the lines of other well-arranged establishments; but the unique feature in Mr. Roberts's store is a massive pitch-pine staircase, with mahogany newalls and handrails, and with balusters carved on an original design by the artist already mentioned. The steps are covered with perforated indiarubber mats, and a word is moulded on each, so that the first flight reads—

BRITAIN  
GREAT  
IN  
STORES  
SPONGE  
BRUSH  
DRUG  
RETAIL  
LARGEST  
THE  
OF  
ONE

The mat on the half-landing bears the legend, "Joseph Roberts, May 1891," and on the remaining steps the words are moulded—

LIFT  
PATENT  
OUR  
USE  
ALWAYS  
MAY  
YOU

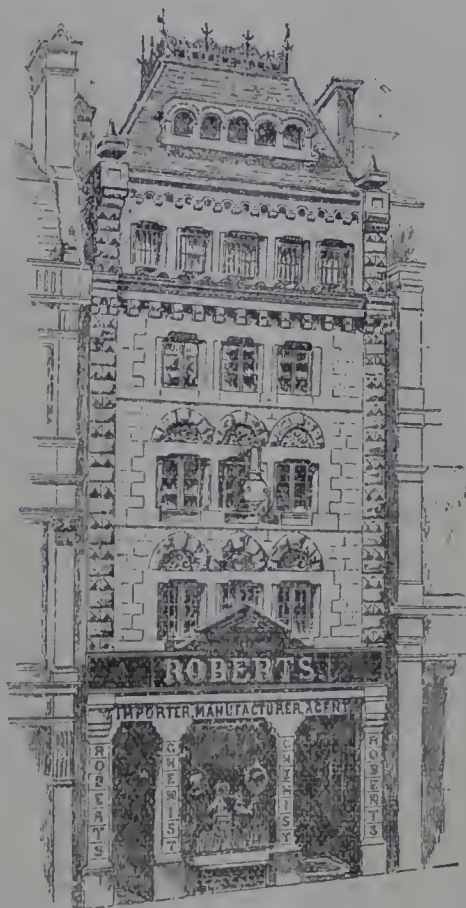
The lift is by the side of the staircase, and in the busy part of the day is in pretty general requisition for passengers. It also conveys goods to the upper floors.

The showroom and dispensing-room, reached by the staircase, occupy the floor above the shop. At one extremity a dispensing-counter, 32 feet long, is enclosed by a screen carried to the ceiling, while another space, where poisons and dangerous compounds are kept, is also specially shut off from the rest of the room. The show-counter measures 30 feet, the shelving occupies 32 feet in length of wall-space, and there is, besides, a neatly-cut-off corner indicated as "The Doctor's Corner."

The four floors above are utilised for stock, empty bottles, &c., while the well-lighted basement is conveniently fitted with counter, wall-cases, sponge-bins, and other cases for showing goods, and a lavatory, wardrobe, and other conveniences for customers and assistants are also provided.

Mr. Roberts is young and active, and takes a great interest in his business. He promises us that he will welcome any brother chemist who may call upon him with the view of looking over his noteworthy establishment.

There are many features of interest and ideas to be gathered from it besides those which we have indicated, and the Northumbrian capital contains, besides, several other pharmacies of exceptional interest.



#### AT THE COUNTER.

"SIFERN of seilzie water" is how they write for it under the shadow of Chester Cathedral.

AN evidently well-studied and laboriously-written order sent to a Hull chemist calls for " $\frac{1}{2}$  Tinterhivinimous  $\frac{1}{2}$  Liquid Pot hass."

MR. WHITE, Masborough, contributes a collection which contains a good many new and ingenious modifications of orthography, such as:—milkysulvy, boss and hunie, spermer city, oil of gubiter, salver latiney, perry goric, tart adcan casted, slipen hell, goldingointment, hard soual oil (hartshorn

oil), gumarrowbeck, hanney seeds, choladrene, tintelcow (tinct. tolu).

SCENE in a pharmacy in a small but fashionable watering-place.—Important Customer: Do you keep cocoa-heena here? Pharmacist: Yes, sir; but you have got hold of the wrong name. You mean cocoatina. I. C.: Oh dear no! Not cocoatina, but cocoa-heena. It is a substance of very recent introduction—in fact, is only used by some of the leading physicians in London. I don't suppose you will have heard of it.—With difficulty, and after a considerable amount of mutual explanation, it was found that cocaine was the article meant. The I. C. did not, however, require any at present—merely desired to know whether it was obtainable in this benighted neighbourhood.



# INDICATORS OF NEUTRALITY USED IN THE VOLUMETRIC ANALYSIS OF PHARMACEUTICAL CHEMICALS AND PREPARATIONS.

By R. A. CRIPPS, F.I.C.

THE following is a very full abstract of a paper read by the author to the Midland Counties Chemists' Association on Tuesday evening, November 24. After referring briefly to the principles of volumetric analysis, especially alkalimetry, on similar lines to the article on this subject in THE CHEMIST AND DRUGGIST, September 26, p. 479. Mr. Cripps proceeded to say that until comparatively recent years litmus was practically the only indicator of neutrality employed in quantitative experiments, although cochineal had been used to a small extent; and for qualitative purposes turmeric, infusion of roses, or infusion of red cabbage. Now, however, we have quite an army of indicators, and, although there is plenty of room for experiment with new substances as indicators for special purposes, yet we can carry out analysis by simple volumetric methods which until recently were only attainable by gravimetric processes.

*Requirements of a Good Indicator.*—Before proceeding to a description of the individual indicators we will first enumerate the conditions to be fulfilled by a good indicator for any particular purpose.

1. The end-reaction should be marked by a prominent change of colour.
2. To effect this change, the smallest possible quantity of reagent should be required.
3. High tinctorial power, which of itself assists in the fulfilment of the second requirement, less indicator being used.
4. This change should be unaffected by the impurities commonly present in the substance under examination.
5. This change should be unaffected by the products of the reaction.

No one indicator of acidity or alkalinity at present known will fulfil these last two conditions in all cases in which neutrality indicates the end-reaction, and such a substance is likely to remain a desideratum. The chemist must, therefore, select his indicator after due consideration of the reactions involved and the impurities present in each case.

In addition to these, it is a distinct advantage if the colour-reaction is equally decided in alcoholic as in aqueous liquids.

Each indicator was then described and its uses explained.

## LITMUS.

The method of preparing this colouring matter was described, and the author stated that of its colouring principles—the chief of which are azolitmin, erythrolitmin, and erythrolein—the first is the most important. Azolitmin is soluble in water, but insoluble in alcohol; erythrolitmin and erythrolein are readily soluble in alcohol, but only sparingly so in water.

The method of preparing solution of litmus given in the Appendix of the B.P. was next described. The object of the method is to get a large proportion of the azolitmin in solution with very little erythrolitmin or erythrolein—these being, to a large extent, removed by the spirit. Much of the colouring-matter remains as an insoluble cake in the residual powder. When kept in closed vessels litmus solution gradually loses colour, but this returns on exposure to the air and consequent absorption of oxygen. For this reason the solution should be stored in bottles having a cork with a small hole or glass tube in it, or the difficulty may be overcome by saturating the solution with sodium chloride, which prevents the fermentation, to which this loss of colour is due.

*Uses.*—Litmus may be used in a very large number of titrations. It is of value in the titration of most mineral acids and a few organic acids—*e.g.*, benzoic or oxalic. It also answers well in the titration of alkaline hydrates when free from carbonates; but, for carbonates, bicarbonates, or substances which on titration liberate carbonic acid, a reliable end-reaction can only be obtained by boiling the solution in order to liberate the gas. It answers fairly well for ammonia, and, under certain conditions, the carbonate of ammonium and preparations containing it; also for borax. It is useless for phosphoric or arsenic acid, phosphates, or

arsenates, on account of the gradual change of tint. For many organic acids—*e.g.*, tartaric and citric—it is unsatisfactory, as the end-reaction is very indistinct.

*Inorganic Acids, Oxalic Acid.*—The acid to be tested is weighed into a flask, diluted with water, two or three drops of solution of litmus added, and solution of soda (free from carbonate) added from a burette until the red colour changes to blue. The change of colour is readily distinguished. It is a great mistake to use too much litmus solution, thereby obscuring the tint.

*Hydrates, Carbonates, Bicarbonates.*—Alkaline hydrates almost always contain more or less carbonate. When using litmus as indicator, the standard solution of sulphuric acid is added until the blue colour becomes purplish red; the mixture is boiled, when the blue colour returns as the  $\text{CO}_2$  escapes, more acid is then added, and again boiled. This alternation is continued until the blue colour ceases to return on boiling.

*Organic Salts of Alkalies.*—Organic salts, such as tartrates, citrates, acetates, benzoates, &c., yield carbonate of the metal when ignited, whereby their volumetric estimation is easy. A weighed quantity is incinerated very gently and gradually until no more tarry vapours are emitted, the carbonaceous residue washed several times with water, and the filtered washings titrated by means of sulphuric acid and litmus as indicator, as for carbonates. In this way, cream of tartar, Rochelle salt, citrates of potassium and lithium, tartrate of potassium, benzoate and salicylate of sodium, and many other salts used in pharmacy may be examined.

*Ammonia* may be treated just the same as sodium hydrate, but not boiled. Carbonate of ammonia cannot be treated like carbonate of sodium, as the ammonia would be boiled off with the  $\text{CO}_2$ . The best way to overcome the difficulty is to add a known excess of standard  $\text{H}_2\text{SO}_4$ , boil, to get rid of  $\text{CO}_2$ , cool, and then add soda solution till the blue tint reappears. The difference between the quantities of acid and soda solutions represents the alkalinity of the ammonium carbonate. *Spiritus Ammon. Aromat.* may be treated in exactly the same way.

*Borax.*—The liquid assumes a wine-red tint before the reaction is complete; it must be continued till a distinct red colour is produced. The reaction is fairly distinct.

*Vinegar and Coloured Liquids.*—Solution of litmus cannot be used with coloured liquids—such as vinegar, lime-juice, oxymel, &c.; the change of tint is so much obscured by the changes which occur in the colouring matter. It was formerly usual to overcome this difficulty by the use of litmus-paper, which was dipped into the liquid from time to time as the titration progressed, the paper being rinsed with distilled water when near completion. This expedient is quite unnecessary now that other indicators have been introduced.

## COCHINEAL.

The author described the collection and characters of the cochineal insect, and stated that the solution of the colour is prepared by macerating 3 grammes of cochineal in 250 cc. of a mixture of rectified spirit and water (1 to 3) for a few days and filtering. It is pale orange-red in acid liquids, and purple with alkalis.

*Uses.*—Cochineal is a delicate indicator. It may be used with advantage in place of litmus for the titration of ammonia and its preparations. It possesses the great advantage of not being affected by carbonic acid, consequently carbonates and bicarbonates may be titrated without boiling. It has been used for the estimation of alkali in soap, but has been superseded by newer indicators.

## PHENOLPHTHALEIN.

*Preparation.*—Phenolphthalein is obtained by heating phenol with phthalic anhydride and sulphuric acid to  $120^\circ\text{--}130^\circ\text{C}$ . for several hours with water, and subsequently treating with alkali and acetic acid, and purifying by crystallisation from alcohol. It is nearly insoluble in water, and the B.P. (Appendix) tincture, 1 in 500, is made with proof spirit. It possesses feeble acid properties, and forms deep pink solutions of its salts with soda or other alkalis; hence its value as an indicator. The phthaleins form a group of compounds produced by the combination of phthalic anhydride with the phenols; this is the compound with ordinary phenol. A single drop of the B.P. solution is sufficient for most titrations.



*Uses.*—Phenolphthalein is a most valuable indicator, its well-marked and prompt change from colourless to pink, or *vice versa*, is so readily observed. It may be employed in the titration of mineral and organic acids, and most alkalies; but is quite useless in the presence of ammonia or its salts unless special precautions be observed. It is neutral to bicarbonates, therefore to estimate carbonates the liquid must be boiled as with litmus, or it must be largely diluted. For borax also it is inapplicable, the colour gradually fading away as the acid is added. Phosphates and arseniates containing one atom of replaceable hydrogen are neutral to phenolphthalein; consequently it may be used in the titration of phosphoric acid, but other indicators are more satisfactory. Phenolphthalein does not produce the characteristic pink colour with most alkaloids, but it may be used in titrating a few—*e.g.*, atropine, daturine, and hyoscyne. One great advantage possessed by phenolphthalein over litmus is that its indications can be clearly read in many coloured liquids, such as vinegar, lime-juice, aromatic and sulphuric acid. Another is its employment in alcoholic solutions, with which the indications are almost as sharp as in water. On account of this latter fact, phenolphthalein is the indicator for the estimation of free alkali or acid in soap, or of free fatty acid in oils.

*Organic Acids.*—The method of titration is the same as that described for mineral acids with litmus, the soda solution being added till a permanent pink coloration is produced.

*Carbonates.*—If the water used for dilution be recently boiled, and in large quantity, so as to prevent evolution of  $\text{CO}_2$ , carbonates may be titrated directly without boiling, the neutral point being reached when the whole of the alkali exists as bicarbonate; but it is preferable to boil as with litmus, the neutral point being then the same.

*Alkaloids.*—Atropine, &c., cannot be titrated in alcoholic solution; they should be dissolved in an excess of centinormal  $\text{HCl}$ , and then titrated back with bicentinormal  $\text{Ba}(\text{HO})_2$ . The difference between the quantities of acid and alkali solution used represents the alkalinity of the alkaloid present. Baryta is preferable to soda, as it is free from carbonate. It should be standardised immediately before use.

*Soap.*—To determine the amount of free caustic alkali in soap, 10 grammes are exhausted by treatment with strong spirit (56 over proof or upwards) which has been previously rendered exactly neutral by the addition of soda. Filter if necessary, and add 5 to 10 drops of phenolphthalein solution. If a pink coloration be produced, titrate with seminormal or decinormal  $\text{HCl}$ , and calculate to  $\text{NaHO}$  or  $\text{KHO}$ . If no pink coloration the soap is either neutral or acid; in the latter case decinormal soda is used to titrate.

*Fixed Oils.*—The proportion of free fatty acid present in olive and other fixed oils is of great importance. It may be accurately ascertained by titration with soda and phenolphthalein. Five to fifty grammes (or c.c. if the sp. gr. of the oil be known) are mixed with about double the volume of neutral spirit, and heated to boiling, thoroughly agitated, phenolphthalein added, and decinormal soda run in with frequent agitation until the pink colour appears. Another test of great value in some cases is the estimation of the quantity of caustic potash required to completely saponify an oil or fat. About 25 grammes of the oil or fat are introduced into a flask, together with 25 c.c. of an alcoholic solution of caustic potash of about seminormal strength. The flask is provided with a return condenser, and heated on a water-bath for about half an hour, or until solution is complete. A similar flask, containing 25 c.c. of the  $\text{KHO}$  solution, is heated in the same way. One c.c. of phenolphthalein solution is now added to each flask, and both titrated with seminormal  $\text{HCl}$ . The difference between the two represents the  $\text{KHO}$  combined with the oil.

#### GALLEIN.

Anthracene violet, pyrogallo phthalein, or gallein, was proposed for use as an indicator by M. Dechan. It is prepared by heating a mixture of 1 part phthalic anhydride and 2 parts of pyrogallol. Finally, this is recrystallised in a similar way to phenolphthalein. Gallein is a dark reddish crystalline solid, possessing a greenish lustre. It is insoluble, or nearly so, in water, but readily soluble in alcohol. In commerce it is frequently sent out as a paste mixed with water. With

alkalies it forms a violet-pink coloration, which is changed to a pale yellowish brown on addition of an acid in excess. A solution in rectified spirit, 1 in 1,000, is employed.

*Uses.*—Gallein is a more delicate indicator towards alkalies than phenolphthalein; many of the alkaloids may be estimated by its use, amongst which may be mentioned strychnine, morphine, quinine, cinchonidine, and atropine. It may be used in presence of ammonia or ammoniacal salts, and, like phenolphthalein, indicates sharply with citric, tartaric, and other organic acids. The author preferred phenolphthalein in the titration of organic acids, and, contrary to M. Dechan's experience, does not find it wholly unaffected by carbonic acid. Speaking generally, gallein may be used for most purposes for which phenolphthalein is employed, and also for ammoniacal compounds and many alkaloids.

#### METHYL ORANGE.

*Syn.*: Perrier's orange iii., helianthin, mandarin orange, &c. It is produced by the action of diazo-sulphanilic acid upon dimethylaniline; the acid so formed is converted into sodium salt, purified by reprecipitation with  $\text{HCl}$ , and again converted into sodium or ammonium salt. An orange-coloured powder, soluble in water and slightly soluble in alcohol. The conflicting statements as to the value of methyl orange have tended to bring this indicator into disrepute; it is, therefore, of great importance that the characters and tests of a good article should be carefully described. This has already been done by Mr. A. H. Allen. They are:—

1. Aqueous solution not precipitated by alkalies, (orange i. becomes red-brown; orange ii., brownish-red.)
2. Hot concentrated aqueous solution yields with  $\text{HCl}$  microscopic acicular crystals of the free sulphonc acid, soon changing to small lustrous plates or prisms having a violet reflection. (Orange i. gives yellow-brown colour or flocculent precipitate; orange ii. brown-yellow precipitate.)
3. Dissolves in concentrated  $\text{H}_2\text{SO}_4$  with a reddish or yellowish-brown colour, which on dilution becomes a fine red.
4.  $\text{BaCl}_2$  yields a precipitate.
5.  $\text{CaCl}_2$  yields no precipitate. (Orange i. gives a red precipitate.)
6.  $\text{PbA}_2$  yields an orange-yellow precipitate. (Acid yellow gives no precipitate.)
7.  $\text{MgSO}_4$  in dilute solutions, precipitates the colouring matter in microscopic crystals.

To these may be added the following test of delicacy:—To 50 c.c. of distilled water add 1 drop of a solution of methyl orange in 25-per-cent. spirit, containing 1 grain in the ounce, the colour will be yellow; add vigintinormal  $\text{HCl}$  from a delicate pipette or burette, 2 c.c. should produce a complete change of colour to pink. Mr. Cripps stated that he had met with two distinct articles, sold under the name of methyl orange, and another as helianthin. Mr. Allen gives gold orange, or tropeolin, as synonyms of methyl orange; but, according to Thorpe's "Dictionary of Applied Chemistry," this body contains diphenylamine in place of dimethylaniline, and is the same as "orange iv." A sample of "tropeolin" examined was distinct from either of the three above named. The solution employed in analysis is 1 grain to 1 oz. of a mixture of rectified spirit and water. One drop of such a solution is sufficient to tint 100 c.c. of water a distinct orange-yellow colour, which becomes pink on addition of a mineral acid.

*Uses.*—Methyl orange is one of the most valuable indicators. It is a compound of a comparatively powerful acid, consequently only those acids which are capable of displacing it in combination will give the indication; while, on the other hand, when the free acid is present in a liquid the appearance of almost the weakest of bases is immediately shown. Methyl orange is, therefore, a very delicate indicator of alkalinity, but not so of acidity, unless the acid be one of the powerful mineral acids. Its great value consists in the fact that carbonic, hydrosulphuric, boric, silicic, arsenious, oleic, stearic, and many other acids are totally without effect upon it, and therefore the bases in their alkaline salts can be determined with accuracy, just as though they were in the free state. It answers well for ammonia. It is altogether useless for the titration of citric, tartaric, oxalic, acetic, and almost all organic acids, the end-reactions



being too gradually produced; it acts well for sulphuric, nitric, and hydrochloric acids, but is decomposed by nitrous acid. Phosphoric and arsenic acids are rendered neutral to methyl orange when only one-third of the acid has been combined with a base, the end-reaction being well defined. We have previously seen that phenolphthalein indicates neutrality when two-thirds of the acid are combined. Thomson, in a most valuable series of papers upon indicators, C. N. xlviii., pp. 123, 184; xlix., pp. 32, 40, 119; lii. pp. 18, 29, suggests this as a good method of estimating phosphates of sodium or potassium, or phosphoric acid.

*Phosphate of Sodium, Phosphoric Acid, &c.*—To a solution of 5 to 10 grms. of the salt add a drop of solution of methyl orange and sufficient normal sulphuric acid or normal sodium hydrate to produce exact neutrality. The solution is boiled to expel  $\text{CO}_2$ , if present; phenolphthalein added, and then normal soda until a faint alkaline reaction is produced. The amount of soda solution used is exactly one-third that required to produce a normal salt with the whole of the phosphoric acid present, consequently each c.c. equa's 0.93 grm. of phosphoric acid.

*Phosphate Syrups.*—Methyl orange can also be used for liquids containing free phosphoric acid in conjunction with iron salts, such as syrup of phosphate of iron; but the result is not quite so accurate, and requires some practice to detect the end-reaction with precision. For the case mentioned, take 5 c.c. of the syrup, dilute with about 50 c.c. of water, add 2 drops of solution of methyl orange and decinormal  $\text{NaHO}$  until the first distinctly orange-yellow colour is produced. The number of c.c. used  $\times .0098$  equals the weight of  $\text{H}_3\text{PO}_4$  present.

*Borax.*—Methyl orange is all that can be desired for this substance.

*Carbonates and Bicarbonates of Sodium, Potassium, &c.*—These may be titrated directly with  $\text{H}_2\text{SO}_4$  in the cold.

*Soda Water, Potash Water, Fluid Magnesia, &c.*—These can all be accurately estimated by using methyl orange and decinormal acid.

*Sulphate of Copper, and other Metallic Salts.*—If precipitated by  $\text{SH}_2$ , filtered and titrated with normal  $\text{NaHO}$  and methyl orange, the acid radical in many salts may be accurately determined.

*Alkaloids.*—Methyl orange may be used for most alkaloids in the same way as gallein, which is to be preferred, however.

*Sulphites.*—The acid sulphites,  $\text{NaHSO}_3$ , &c., are neutral to methyl orange, but the estimation of sulphites is not accurate if carbonate be present.

*Combined Alkali in Soap.*—To the same solution that was used for estimating the free alkali by phenolphthalein, a few drops of methyl-orange solution are added and a considerable quantity of water, and the titration continued with semi or deci normal  $\text{HCl}$ . The additional quantity required to produce an acid reaction is due to combined alkali. The residue on the filter from the original alcoholic solution contains any carbonate of sodium or potassium, and may be titrated with methyl orange as usual. Methyl orange cannot be used in alcoholic solution.

Mr. Cripps also spoke about phenacetolin and Congo red (both unsatisfactory), and on lackmoid and iodeosine. His remarks on the last-named we reserve.

THE CHEMISTS' ASSISTANTS' ASSOCIATION, an excellent society, designed "to promote social intercourse among chemists' assistants, and the discussion of subjects tending to the welfare of all interested in pharmacy," prescribe a very pleasant mixture:—

- 1 hr. conversazione.
- 2 hrs. concert.
- Dancing ad lib.
- (To be taken annually.)

On Thursday night the Portman Rooms were thronged with chemists' assistants and their friends, and, after the serious unsiness of the evening was over, they gave themselves up to dancing—and the discussion of subjects tending to the welfare of all interested in pharmacy. Among those interested in pharmacy I noticed a number of very pretty girls, who seemed disposed to contribute to the welfare of the chemists' assistants. Lucky young dogs, to whom physic has been thrown!—*Referee.*



AND

## Literary Notes.

"FAME" is the title of a monthly journal, recently established, which is of special interest to advertisers. No. 4, just published (2<sup>nd</sup> ed.), contains articles on "Art in Advertising," by Thomas J. Barratt (Pears'); "Advertising in Australia," by James Bonwick, F.R.G.S.; "Should Advertisers Combine?" by G. G. Macpherson (Warner's Safe Cure); "Dishonest Substitution," by W. E. Geddes (St. Jacob's Oil), Mr. Packard (Seigel's Syrup), S. M. Burroughs, and others; and there are many other notes and comments on advertising topics which patent-medicine people especially will find it useful to read. Our contemporary has been trying to work up a boom on the question of chemists substituting, such as has proved such a draw to some advertising agents in the United States. One anonymous correspondent, writing under the title "Highwaymen of Trade," calculates that in the case of proprietary medicines advertisers do not, on an average, get more than one-quarter of what he seems to regard as the legitimate benefit of their advertisements. It is the chemists, he says, who are most persistent in pushing cheap substitutes and inferior preparations. The great advertisers take more reasonable views. Mr. Geddes says the proceeding is "exceedingly irritating and, to the advertiser, most unfair, but in the long run it is injurious to the traders themselves who practice it. Reputable traders would not attempt it; nor, even if it were conceivable that they were so disposed, would they venture to risk the loss of custom which it must eventually entail." Mr. Packard says, "When retailers try to persuade customers to take something they prepare themselves in lieu of the popular article asked for, it is the fault of the purchasers if they permit themselves to be misled; but they are generally shrewd enough to insist on obtaining what they want if not in one establishment, then at another."

*Pharmacographia Indica: a History of the Principal Drugs of Vegetable Origin met with in British India.* By William Dymock, C. J. H. Warden, and David Hooper. Part IV. London: 1891. Kegan Paul, Trench, Trübner & Co. (Lim.)

THE present part of "Pharmacographia Indica" concludes the second volume, and takes the authors as far as Solanaceæ, the principal plants of this order being included. We take it that another volume will be necessary to finish the materia medica of India. Part IV. begins with the remaining drugs, obtained from composite plants, which were not treated in the first half of the volume, the other more important orders which are included being Apocynaceæ, Asclepiadaceæ, Loganiaceæ, Gentianaceæ, Boraginaceæ, Convolvulaceæ, and Solanaceæ. There is, therefore, excellent scope provided to the authors for utilisation of ethnological and philological knowledge regarding the many valuable drugs which are included in these orders. Domestic medicine in India is an appalling thing, and the empirical practice of native doctors has no less fearful an aspect. Still, much of it, relieved of superstition, has been found to be valuable, and "Pharmacographia Indica" will chiefly be notable for the authors' observations in this department, and for their accounts of the collection of staple drugs. Part IV. contains many interesting notes, for the collection of which the authors are entitled to due credit; but we question if they are not seriously imperilling the value of their book by loading it so much with details of poisoning cases, and by wholesale reprinting of material from Flückiger and Hanbury's "Pharmacographia." So much of that book appears in "Pharmacographia Indica" at least, in this part of it—that we question if its publication is legal. Apart from that, when one comes across page after page of reprint in a work of this kind, it is natural to doubt if the statements have been verified. It is to be hoped that the remaining parts of the work will show more



careful editing than Part IV. It would be possible, by rigid compression, to greatly enhance the value of the work. We may also point out that, to the ordinary reader, there are gaps in the book here and there. For instance, there is no clue to the connection between *Sneritia chirata* (Ham.) and *Ophelia chirata* (Griseb.). Occasionally the chemical composition of one drug is appended to an Indian one like it. This is scarcely right. We notice that the authors state that *Lobelia inflata* contains two alkaloids—one of them "Lobeline." This is wrong: lobelin is probably a stearoptene—certainly not an alkaloid. They also refer to the late Henry Watts as "Watt." We mention these minor errors and imperfections less in a critical spirit than in the desire to urge the authors to greater care in their work. "Pharmacographia Indica" can be made a classic, but to be so it must be scrupulously accurate.

*Contributions to Practical Medicine.* By Sir James Sawyer, M.D. Birmingham: Cornish Brothers. Pp. 200.

THIS is the second edition of a volume of clinical lectures by one of the most thoughtful and eminent of provincial medical practitioners. All of the essays have been published before in medical journals, but Sir James Sawyer has revised each one with the greatest care, and in most instances has re-written them. We thus get the result of a ripened experience applied to subjects which had been previously well studied. They seem to us to be equally valuable as aids to diagnosis and to treatment in cases the like of which must be familiar and yet sometimes perplexing to every practising medical man.

The first study is one on insomnia, in which the causes and nature of this distressing complaint are differentiated. Overwork, worry, alcohol, tobacco, tea or coffee, the gouty diathesis, and albuminuria are found to be causes of insomnia, and when one of these is traced, the treatment is obvious. Next follow essays on "Phtisical Laryngitis and its Treatment," and a fourth deals with the "Treatment of Pulmonary Consumption," in which the author declares that chloride of calcium has proved in his experience the best general remedy in phtisis. He gives it side by side with cod-liver oil and other medicines and palliatives, generally in 10-grain doses dissolved in 3 drachms of water with 1 drachm of glycerine in a wineglassful of water or milk immediately after meals. Useful lectures on Constipation and Intestinal Obstruction follow. Sir James Sawyer finds Socotrine aloes (1, 2, or 3 grains, as the case may require) with 1 grain sulphate of iron and  $\frac{1}{2}$  grain extract of hyoscyamus the most useful general remedy in cases of habitual constipation. He also speaks highly of cascara sagrada. We have next lectures entitled "Accentuation of the Pulmonary Second Sound of the Heart," "Remarks on Floating Kidney," and "The Treatment of Gastralgia." Next comes a note advocating an ethereal tincture of capsicum for external application, and a paper in which ethereal tinctures are recommended in order to apply medicaments by way of the skin in preference to plasters, as, for example, in the case of belladonna, iodine, and menthol. The last essay is on "*Randia Dumetorum*," an Indian remedy for bowel complaints. The substance of this paper, which was only published in March last, we quoted quite recently in this journal.

*The History of Commerce in Europe.* By H. de B. Gibbins, M.A. London: Macmillan & Co. Price 3s. 6d.

IT has long been a matter of notoriety that the average educational standard of British youths in our business houses falls lamentably short of that of foreigners in a corresponding walk of life. But it is only within the last decade that our mercantile classes seem to have become uneasy about the fact and conscious of the dangers to our future commercial greatness which it involves. Their uneasiness is shown in the steps that have been initiated by chambers of commerce and similar organisations to promote what is called "commercial education." Though in the main of a beneficent tendency, we are by no means sure that those efforts are not often put into operation with more zeal than discrimination. But leaving that question apart, there is certainly room for concise works of a character primarily educational, and at the same time written in a

style sufficiently free from scholastic dryness and pedantry to commend themselves as books of study to young men in business anxious to fill up the gaps of an imperfect schooling, yet reluctant to spend their leisure hours over unreadable works of mere cram. Mr Gibbins, in the little book under review, has produced such a desideratum in the highly important field of commercial history. His "History of Commerce in Europe" deals with a vast subject in a necessarily highly-condensed manner; but he has made his book so interesting throughout that its contents can hardly fail to leave upon the mind of a fairly intelligent reader a clear imprint of the manner in which the enormous commerce of the present day has gradually been evolved out of the barter of the ancients. The work is divided into three books, treating respectively of ancient and classical, mediæval, and modern commerce. It contains several neat little maps illustrating the progress of trade and colonisation; and one of its most useful features are currency-tables enumerating the chief coins of ancient and mediæval commerce, and their values.

## Gazette.

### PARTNERSHIPS DISSOLVED.

Allard, W. E., Bulpitt, A., & Bath, W., under the style of the Conservine Chemical Company, Trafalgar Road, and Summer Road, Peckham, manufacturing chemists; as far as regards A. Bulpitt.

Luscombe & Anderson, Hampdon Hill, Middlesex, surgeon.

Matson, E. J., & Garcia, C. R., Southampton, mineral-water manufacturers.

### THE BANKRUPTCY ACTS, 1883 AND 1890.

#### RECEIVING ORDERS.

Black, John Edward, & Gallon, Matthew (trading as Black & Gallon), Newcastle-on-Tyne, aerated-water manufacturers.

Emmet, William, & Histon, Arthur (trading in co-partnership as Emmet & Histon), Gateshead, mineral-water manufacturers.

Millns, Arthur Albert, Fenchurch Street, City, Stratford, and South Woodford, paint, colour, and varnish manufacturer.

#### ADJUDICATION.

Black, John Edward, & Gallon, Matthew (trading as Black & Gallon), Newcastle-on-Tyne, aerated-water manufacturers.

#### DIVIDEND.

Williams, T. & J. H. (trading as Grindley & Son), wholesale and retail chemists, Chester. Second and final, 1s. 3d.

**MEDICAL FEES.**—A nice point has just arisen at the Holborn Board of Guardians. Dr. Hunter, a member of the board, was called in as a matter of emergency to certify as to the sanity or otherwise of several paupers; but when he presented his account the Finance Committee said, "We cannot pay you because you are a member of the board, and not entitled to benefit pecuniarily by your election." Dr. Hunter, at last Wednesday's meeting of the board, declared that he did not seek the work—the magistrate (Mr. J. J. Goode) sent for him; and, as he attended and certified, he expected to be paid. Mr. Howes thought it would be a bad precedent to recognise the services in question; but the majority of the board thought it a question between the magistrate and the doctor, and not of between the board and the doctor. Mr. Howes: No; but the board has to pay, and it would be an unheard-of matter if a guardian were in a position to sign a cheque for himself. It is not the amount (2l. 10s.), but the principle involved. I should like the Local Government Board asked if this is a legal payment. The Clerk: As an officer of thirty-three years' standing, I tell you it is legal; and yet you want to show the Local Government Board you don't know how to manage your own affairs by asking such a trivial question. In the end the cheque was passed, and the decision came to to ask the Local Government Board as to its legality.



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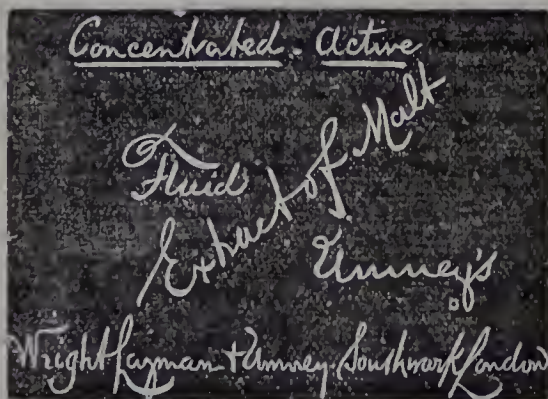
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CHRISTMAS TRADE.

A CHEMIST with a good shop and a fairly respectable public around ought to make much more than is usually the case out



of the annual outburst of Christmas liberality which impels so many people to the purchase of presents. The chemist's shop is, in most places, the spot where the best stock of perfumery, smelling-bottles, brushes, and many fancy articles is expected to be found, so that the enterprising pharmacist who resolves to develop this branch of his business finds the ground ready prepared for him by the traditions which already gather round his business. But it ought to be understood that this branch is one which can only be worth establishing on a fairly extensive scale. The timid way in which many chemists nibble at the perfumery branch ensures the minimum of profit from it, perhaps involves loss. It is very doubtful whether, in many cases, the department pays at all. Chemists with no spare capital, and no spare space, and those who have no chance of attracting a genteel or moneyed *clientèle*, had better not attempt anything in the way of a Christmas display. A few old-stock bottles of popular perfumes with fly-dirtied labels, the remnants of half-a-dozen sachets which have long since expended the first bloom of their fragrance, and an assortment of a couple of dozen old-fashioned smelling-bottles, is not a good enough exhibition to bring a customer intent on present-making a second time into the shop.

The present-givers are really in earnest. The young man, in the first flush of his affection for the sublimest girl on earth is the most hopeful customer of all, if he pays cash but he is by no means the only one. In every community there will be found a *clientèle* of purchasers; and the chemist simply misses them because he has not the courage and the faith necessary to provide for them.

In every good chemist's shop there should be a counter for elegancies and novelties. This should be backed up with mirrors and show-cases, and this counter should always be a haven of rest for the ladies of the district on their "shopping" expeditions. There should be a constant importation of novelties in it, and towards Christmas it should be piled with attractions—fifty or a hundred pounds' worth distributed among smelling-bottles, ivory brushes, bottles and cases of perfumery, eau-de-Cologne, scientific novelties, toilet-bottles, odorators, with, it may be, photographic cameras, magic-lanterns, and microscopes. But the essential to ultimate success is pluck. There are buyers of these goods in large towns, and they will come in time, and come again, to a place where they can see an assortment, and where they can find novelties. The first year's experiment is likely enough to result in a loss, but the investment will be a remunerative one in the end if properly followed up, and a class of customers will be brought into the shop which will permanently elevate the character of the business.

We bespeak a little space on every chemist's counter this Christmas-time for our little book "Scientific Mysteries," which we have got up for sale by the trade. It is attractive outside and inside; contains over eighty illustrations, and gives instructions for the performance of nearly two hundred experiments, many of them involving the purchase of chemicals and chemical apparatus. The sale of the book will, therefore, not only yield a profit by itself, but will encourage new trade, which may be made a source of considerable profit. Particulars of the book are printed on the back page of our Supplement this week, and orders may be sent in at once.

#### DRUGS FROM CAPE COLONY.

THE enormous changes which have been wrought in international commerce during the present generation by improved means of communication and the rapid spread of commercial news, have tended to diminish the importance

of those ports which depended mainly on their favourable position as distributing centres. They have also resulted in cheapening nearly all staple crops. That cheapening, in its turn, has had the effect of rendering the haphazard collection of natural products of the soil absolutely unremunerative, and unskilled or careless cultivation nearly so. Hence, general despair among jog-trot agriculturists all over the world, followed by the appointment, in every direction, of Government commissions to find out how to help them.

The people of Cape Colony have not hitherto had the reputation either of paying much attention to the propagation of new products upon their soil, or even of making the most of what it brings forth at present. Want of suitable communications accounts to some extent for their backwardness, but, never an all-sufficient excuse, its force is lessened from year to year; and now, the Cape Government, following in the wake of other authorities, has appointed a "Commission on Colonial Industries," which is gathering expert evidence for the purpose of finding out to what new profitable ends the soil of Cape Colony may be turned.

At the last sitting of this Commission Professor MacOwan, Director of the Cape Town Botanical Gardens, gave evidence on Cape vegetable products. His testimony, as reproduced in a lengthy report in the *Cape Argus*, has not by any means a cheerful or confident ring about it. Possibly the stingy treatment by the Cape Legislature of its botanical gardens and museum affected Professor MacOwan's spirits. If the Cape people are really in earnest about the growth of new products, they should prove their sincerity by providing the funds required to make their botanical gardens as useful to South Africa as those of Kew are to this country, of Buitenzorg to the Dutch East Indies, and of Péradeniya to Ceylon.

There appears to be a feeling among the Cape Colony agriculturists that olive-growing would prove a paying investment. There are plenty of wild olive-trees at the Cape, and the idea seems to be that the best varieties of French and Italian plants might be grafted upon these. Professor MacOwan appears inclined to throw cold water upon this scheme, and not without reason. We doubt if olive-farming is a paying industry anywhere at present. Cotton-seed and other oils have replaced olive oil to a large extent, not only for manufacturing but also for eating purposes. In common or technical oils, the Cape farmer could scarcely expect to compete successfully with his fellow-agriculturists in Morocco, Tunis, and the Levant generally, and to attempt to drive out the fine French and Italian table-oils would be an altogether hopeless task. A suitable soil, a good climate, and cheap unskilled labour are excellent things in their way, but they are, fortunately, not everything. Dexterous workmanship and plodding watchfulness also count for much, and nowhere more than in industries in which the French excel. Just as the Americans find that they cannot make tinplates or fine cutlery unless they import British workmen to teach them the way, so the Cape people would discover that any natural advantages they might possess would avail nothing without the aid of French workmen excelling in gifts acquired by training as much as in those inherited from generations of predecessors in the same industries. The same obstacles to success apply to the distillation of essential oils. Professor MacOwan mentions that some twenty years ago a London firm of perfumers sent out a small distilling and enfleurage plant for experimental purposes to a Mr. Kennedy, of Humansdorp, in Cape Colony. Unfortunately, the consignee died before the plant could be put to work, and since then no other efforts at essential-oil distillation have been heard of. We doubt whether, if initiated, they could be successful now. To say that there are not



at this moment half-a-dozen kinds of essential oils produced outside Europe which leave a fair profit to their growers is but to record a fact notorious in the trade. Whether it be eucalyptus, patchouly, lemongrass, citronella, or what not, a new grower need but attempt to find a sale for his goods in Europe or America to receive proof of the hopelessness of his task. Saffron is next suggested as a possible Cape growth, the reason given for advocating it being that the western parts of Cape Colony are pre-eminently the country for bulbous plants. We are afraid that here, again, cultivators would fail to find a profitable market. Spain and France produce saffron enough for the world's requirements; in fact, if rumour speaks truly, the Spaniards are likely to restrict their cultivation greatly next year. Some years ago samples of saffron of very good quality from Ceylon were shown in London, but the would-be shipper, upon closer investigation of the market prospects, refrained from sending any further consignments. Scammony and castor oil, which are also suggested, are similarly likely to cause disappointment, though it is but fair to say that of the latter drug South Africa now imports large quantities from India, in spite of the abundance of the ricinus plant on her own soil. But is there, then, no consolation anywhere for the intelligent and industrious cultivator, anxious to lead the way in new methods of cultivation? There is; and such a one need not go far a-field. The choicest gifts, as the poet has said, lie neglected around him—lie close about his feet. How is it that we get little beeswax and practically no honey from the Cape? To Professor MacOwan the same question has evidently occurred and he can only answer that the almost entire absence of both products from among the list of Cape exports is inexplicable to him. So it is to us. We import thousands upon thousands of packages of honey from Chili, California, Jamaica, Cuba, Australia, and other countries every year, and hundreds of tons of beeswax from almost every part of the world. Both honey and beeswax are products of which the consumption is increasing materially. Neither in California nor in Chili is bee-farming as yet a generation old. Fine pressed honey in tins is worth about 45s. per cwt. now upon our markets; good yellow Jamaica beeswax from 7l. 5s. to 7l. 15s. per cwt. But if the Cape people must needs introduce some new economical plants, we should think that the cultivation of insect-flowers offers about as good a prospect of success as that of any other drug. By providing a cheap and plentiful supply of insect-powder the cultivator would not only benefit himself financially, but he would have the satisfaction of contributing largely to the comfort of his fellow-citizens all over South Africa. The commercial cultivation of the plant, we believe, is about to be undertaken now in Natal, and the growers there commence with the prospect of a practically unlimited market at their own doors.

Professor MacOwan, in his evidence before the Commission, comments severely upon the slovenly manner in which aloes-juice is prepared in South Africa. With a proper mode of cultivation, he thinks, Cape aloes might be made as valuable as the best Socotrine kind, which now, we may observe by the way, fetches about six times as much money. The Professor mentions the interesting fact that in 1860 an English farmer in Natal showed him a calabash of treacly aloes-juice, which he had prepared experimentally for the English market, and which contained as large a proportion of crystallisable aloin as the best Socotrine aloes. Unfortunately, the experiment was not repeated. The reason that the Cape aloes of commerce contains no aloin must be sought, Professor MacOwan thinks, solely in the unworkmanlike manner of its preparation. If this view be correct, we

shall have to revise our authorities. Natal aloes is, indeed, known to yield an aloin ("Nataloin"), but all pharmacognosists have hitherto held that in Cape aloes, which is the produce of a different plant, aloin is constitutionally absent.

Of the other drugs, the cultivation of which Professor MacOwan discusses, jalap would seem to us to offer a fair chance of remunerative cultivation; and if the South African farmers could be induced to see the wisdom of investments for the future, it might be advisable to try the cultivation of camphor, which has been successfully accomplished in Florida and in certain parts of Natal. In fact, the planting of forest-trees is usually a profitable investment; "but," says our witness, "I doubt if patience is a common virtue here. In this colony we plant trees, truly, but they must be quick-growing ones or we will have nothing to do with them. Then we cut them down for timber while they are still babes, and cry out on them for not having heart-wood."

After all, perhaps, nothing among new cultures will pay the South African soil-tiller better than the intelligent cultivation and treatment of edible fruits of all kinds, and, in some parts of his country, of fibre-plants. For these he has the materials ready at hand. He might raise bad exotic drugs which would compel us to throw his physic to the dogs, much as, in the Transvaal, he throws his own peaches to the pigs.

#### FRENCH APOTHECARIES IN OLDEN DAYS.

M. ALFRED FRANKLIN, whom we assume to be a Frenchman, is publishing with the Librairie Plon at Paris a series of works on the domestic life of the past (*La Vie Privée d'Autrefois*). His volumes deal with the kitchen, the table, the toilet, and also with matters of more important historical interest, such as the records of artisan corporations, hygienic provisions, measures of time, &c. A volume of especial interest to us has just appeared under the title of "*Les Médicaments*." The first section of this work manifests much industry of research, and brings before the reader a particularly graphic account of the condition of French apothecaries from the middle of the thirteenth century up to nearly the date of the French Revolution. The second part of the treatise consists of a series of extracts from old medical writings, quoting especially a number of the disgusting details respecting the preparation of medicines from animals, from the skulls of men and women, from their excrements and from other sources, many of which have been published in this country also to a wearisome extent.

It is curious to notice with what persistence the history of pharmacy and of medicine generally in France has preceded that of this country, not by a few years merely, but, as a general rule, by centuries. There were apothecaries in England before the time of Chaucer in the fourteenth century, whose physician—

Full rely hadde he his apotecaries  
To send him dragges and his letuaries.

But in England there was no attempt at organising any branch of the medical profession until Henry VIII.'s reign, when, in 1511, the "Act for Appointing Physicians and Surgeons" was decreed, the College of Physicians being founded in 1518, while it was in 1540 that the College was endowed with power "to search apothecary wares and drugs, and destroy such as they found unfit for use." In France an order of Philippe VI., dated May 22, 1336, required the apothecaries and their servants, and the herbalists, to submit their wares to the examination of the physicians of the



Faculty. A statute of 1353 regulates the business of the *espiciers-apothicaires*. It is therein ordered that no one shall undertake this commerce unless he knows how to read his recipes or shall have someone in his employment with this degree of education. He is not to sell venomous or perilous medicines; when he compounds a medicine to be kept some time he is to mark on the pot the month and the year of the preparation; he shall sell at a loyal, just, and moderate price; and the Act also requires the appointment of a master of the apothecaries, who, with two physicians to be nominated by the dean of the Faculty, shall twice a year visit the apothecaries' shops of Paris and the suburbs, and examine with care all the substances there kept. The master is also to see that every apothecary is provided with the book called the "*Antidotani Nicolas*," which was the *Pharmacopœia* compiled by an Alexandrian physician named Nicolas Myrepsis in the thirteenth century, containing 2,656 formulæ. This book continued to be the leading pharmaceutical authority until the first Codex was published in 1637. The apothecaries and grocers were incorporated in England in a united body in 1606, and the apothecaries got their separate charter in 1617. In France the separation had been proceeding gradually for two or three centuries. Statutes of 1484 and 1514 laid down definitely the distinction between the "*apothicaires*" and "*espiciers*." The apothecary could always be a grocer, but the grocer could only be an apothecary after a longer apprenticeship and passing certain examinations. In 1638 an Act was passed which provided for still more distinction between the *apothicaires-espiciers* and the *marchands-espiciers*. The youth who wished to enter into the inner circle had first to be examined by the "*Gardes*" or "*Jurés*" of the corporation to know if he had studied grammar and was capable of learning the art ("*pour connoître s'il a étudié en grammaire et s'il est capable d'apprendre ledit art*"). He had then to serve a four years' apprenticeship, and after that six years' "*companionship*." Then came a *viva-voce* examination by the Professor of Pharmacy to the Faculty of Medicine and by nine of the master-apothecaries of the corporation. All the master-apothecaries of the guild had the right to be present, but the nine examiners were specially selected. The examination lasted three hours, and the decision was given by the vote of the majority of the whole court. If it was favourable, the candidate passed to the second stage, which was known as the *acte des herbes*. Piles of medicinal substances were before him, and he was required to indicate the names and properties of these. A curious provision was that the sons of members of the guild were exempt from this part of the examination. Lastly, came the *chef d'œuvre*. The aspirant had to compound five important preparations, and as he did so to comment on the drugs he was using.

Another clause in this French Act of 1638 singularly corresponds with a familiar one in the British Act of 1868. It provides that widows of masters "may continue the businesses of their deceased husbands if they shall take and keep in their shops a good servant, expert and competent in the said art and merchandise, who shall be examined and approved by the *Gardes*." It is not necessary to explain what home Act of Parliament this statute of 250 years ago prefigured.

The inevitable struggle between the physicians and the apothecaries which was fought in this country last century raged in France a hundred years previously. It broke out over antimony. This metal in its compounds was the favourite quack medicine of the period. In 1566 and in 1615 the physicians forbade the sale of antimonial compounds by apothecaries. Gradually the apothecaries rebelled,

and before the middle of the century there was open war. The physicians published books of medical advice and formulæ, advising the public how to make medicinal compounds themselves, and exposing the profits of the apothecaries, or *pharmaciens*, as they began to be called about this time. As far as antimony was concerned, it was rehabilitated in a curious way. Louis XIV. fell ill at Calais, and an irregular practitioner of Abbeville, who was called in, cured his Majesty with antimonial wine. The Grand Monarque let it be known that it was his good pleasure that the claims of antimony as a remedy should be reconsidered, and the Faculty of Medicine assembled on March 29, 1666, and discussed its merits. By a majority of 192 to 8, antimonial wine was formally recognised as a remedy. The decision of the Faculty was submitted to the Parliament, which confirmed it, and ordered that its decision should be inscribed in the records of the Faculty by the side of the decree of 1566 forbidding its sale, and those two orders, separated by an exact century, may be read in the rolls of the Medical Faculty to this day on the same page.

### COMMENTARY.

CLAIMS FOR COMPENSATION.—An announcement is published in *THE CHEMISTS' AND DRUGGISTS' DIARY* for 1892 which deserves special note. Having regard to the peculiar and uncertain risks incurred by chemists and druggists in the course of their business, the directors of the Scottish Employers' Liability and Accident Assurance Co. (Limited), of Aberdeen and London, have prepared a special form of policy, insuring the holder against losses which may result from accidents or mistakes in the sale of medicines out of which claims for compensation may arise. The indemnity policy offered by the company is of wide scope, and embraces damages and expenses which may result from the negligence of assistants or otherwise, or against unjust claims made by designing persons. The rates of insurance, which are moderate, vary in accordance with the number of shops and assistants to be covered, and upon the amount of indemnity to be insured against. The company undertakes at its own expense the investigation of claims preferred against its clients, and the cost of defending actions which it may decide to contest.

BENSONAPHTHOL.—A report of this new compound by MM. Yvon and Barlioz, mentioned in our French correspondence on November 7, appears in the *Répertoire de Pharmacie*. It is a benzoate of beta-naphthol prepared by the interaction of beta-naphthol with benzoyl-chloride, the effect of which is that the benzoyl group ( $C_6H_5O$ ) takes the place of a hydrogen atom in the beta-naphthol. Its constitution is, therefore,  $C_{10}H_7C_6H_5O_2$ . The resulting product, purified by crystallisation from alcohol, is obtained in white, microscopic crystals, but may also be got in prismatic needles if desired. It is without odour, and is practically insoluble in water, soluble in rectified spirit to the extent of 2 or 3 grains in an ounce, and soluble 1 in 3 of chloroform. Benzonaphthol is proposed as an intestinal antiseptic, preferable to beta-naphthol. In the system benzonaphthol is split up into beta-naphthol and benzoic acid, the latter being eliminated by the urine as benzoic and hippuric acids. The therapeutic trials made with it show that it is as efficacious as betol and beta-naphthol, diminishing the toxicity of the urine considerably. It may be given to the extent of 5 grammes per day to adults, each dose of 50 centigrammes being enclosed in a cachet or suspended in a suitable mixture.



THE CORN-CURE CASE which we reported last week seemed very attractive to our daily journalists, who have been hard put to this autumn for topics. The *Daily Telegraph* had an article 2 feet 2 inches long on it. The first sentence introduced Celsus and Ambrose Paré, Augustus Caesar, and Queen Elizabeth, and discussed the etymology of the callosity. After that came a semi-facetious account of the trial, and then the writer dropped into Telegraphic science. Analytical chemists, he said, "have by degrees ascertained the ingredients of nearly all the corn-cures, only a very small proportion of which, it must be admitted, can be stigmatised as absolutely innocuous; and, if salicylic acid can vindicate its claim to be an antiseptic, it must be as harmless and, indeed, as beneficent as carbolic acid." We do not usually "stigmatise" articles as "absolutely innocuous," and whether the *D. T.* writer is jocular or only muddled in the last sentence is a puzzle. The *Standard* is a little less oracular. It finds that the New Corn-cure left the court without a stain on its character. But while sympathising with the plaintiff in his pain, it says, "he has not suffered quite in vain if his example teaches the public that every remedy implies a risk, and that cures are not necessarily sure because they profess to be new." To the *Morning Advertiser* scribe the case recalls the history of Mackworth, the quack, and his "cancer-exterminator." Mackworth, who flourished towards the end of last century, acquired a lucrative practice on the strength of his infallible combination of pill and draught warranted to wither out by the roots the most obstinate form of the terrible disease. A patient dying upon his hands, a suspicious relative declared death to be the result of his treatment, and with this allegation haled him into court. The cancer-curer easily triumphed; but it was a Pyrrhic victory, for he found it expedient to confess that his famous pills were flour, water, and peppermint, and that the "poisoned philtres" of the indictment were equally harmless and ineffective.

#### FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

**FIRE AT A CHEMICAL WORKS.**—The chemical works at Croix, a busy manufacturing town in the vicinity of Lille, were the scene of an accident last week. A receiver containing some 4,000 gallons of sulphide of carbon exploded, and the flaming liquid ran into the sewers and burst them, enormous pieces of cast-iron piping being thrown into the canal.

**PHARMACY AND SISTERS OF CHARITY.**—A pharmacist in the centre of France has declined to supply simple and compound drugs to certain Sisters of Charity who were authorised by the mayor of his town to exercise pharmacy. The legal right of the mayor to give such an authorisation is open to the gravest doubt, and the pharmacist, like all French tradesmen, pays simply for an annual "patent," but this only authorises him to sell by retail; if he enter into wholesale business the tax is on the higher scale.

**PHOSPHORUS FOR CHILDREN.**—Dr. Métivier, of the dispensary, rue des Cendriers, prescribed for a child of 2 years old, suffering from an intestinal complaint, external applications of camphorated oil, followed by doses of castor oil; finally, the child having the rickets, he made out a prescription for the internal administration of phosphorated cod-liver oil. The child died 10 days afterwards, and the post-mortem pointing to phosphorus-poisoning, the unlucky pharmacist who had prepared the drug prescribed had the disagreeable experience of being, with the doctor, charged with homicide by imprudence. When, however, the case came before the court, Mr. Bainier, the pharmacist in question, was immediately discharged, having proved that he had accurately prepared the prescription. Dr. Métivier explained that this

treatment by phosphorated cod-liver oil had frequently been attended with excellent results, and he was likewise acquitted later on.

**ILLEGAL PRACTICE OF PHARMACY.**—Dr. Francis Raspail, grandson of the celebrated Raspail, inventor of the camphor treatment, has just been prosecuted by the Syndicate of Pharmacists of the Seine for illegal practice of pharmacy. The doctor was charged with having sold at his shop in the Rue de Lille (1) compound medicaments and (2) simple drugs for his own prescriptions by medical weights. The defence was that the term "medicaments" applied only to articles for internal consumption; that the objects sold—camphorated alcohol and brandy, sedative water, sedative bath, camphorated oil, and quadruple water—were all for external use. Counsel also remarked that such articles were sold at all drug-shops, and that for the last thirty years they had appeared in the catalogue of the firm in the Rue du Temple, which was founded by Raspail, without complaint from any pharmacist. He added that the simple medicaments were delivered of a minimum weight of 30 grammes, which exceeded the medicinal weight, and that their subdivision into the proper quantities was left to the patient. He submitted that by this process the vendor had avoided infringing the law. But the court did not share his opinion, and gave a verdict for the plaintiffs, who were awarded 200*fr.* damages, in addition to which Dr. Raspail has to pay a fine of 500*fr.*

#### MARRIAGES.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

**BURNES—TOUCHBURN.**—On Nov. 10, at St. James's Church, Dublin, by the Rev. Forde Touchburn, M.A., brother of the bride, assisted by the Rev. J. C. Irwin, B.D., vicar, and the Rev. Gilbert Mahaffy, M.A., rector of St. Paul's, Rodolph Arthur Colston Burnes, B.A., M.B. B.Ch., B.A.O., T.C.D., member and councillor of the Pharmaceutical Society of Ireland, to Mary Katherine, elder daughter of Adam Touchburn, Dublin.

**MERRIN—RHODES.**—On November 23, at St. Peter's, Dublin, by the Rev. R. J. Merrin, B.A., brother of the bridegroom, assisted by the Rev. E. H. Weir, B.A., Mr. P. Merrin, M.P.S.I., L.M., Dublin, to Elizabeth Barney (Bessie), second daughter of the late Mr. Samuel Cooper Rhodes, Roscrea.

**MEYLER—CRONYN.**—On November 18, at St. Peter's Church, Dublin, by the Rev. Edward H. Weir, B.A., Mr. J. F. C. Meyler, M.P.S.I., manager of Stirling's Medical Hall, Kilkenny, to Margaret, second daughter of the late Mr. John Cronyn, Friar's Hill, Thomastown, co. Kilkenny.

#### DEATHS.

**HILLS.**—On November 19, 1891, at 45 Queen Anne Street, W., Mr. Thomas Hyde Hills, pharmaceutical chemist, in his 77th year.

In Mr. Hills English pharmacy has lost one of its best-known names, and the Pharmaceutical Society one of its past presidents and most generous friends. For several years Mr. Hills has been laid aside from business and from social life. He retired from the Pharmaceutical Council in consequence of failing health in 1882, and since then has been seldom seen in public. He had only been compelled to keep his bed, however, for a few days before his death. Just a week previously he had been wheeled out of doors in a Bath-chair.

Mr. Hills was born in Maidstone in 1815, and after being educated at the grammar school in that town and at Goudhurst, in Kent, he was bound to Mr. Thorby, chemist, of Brighton, whom he served as apprentice for five years and ten months, when he attained his 21st birthday, and for eight months afterwards as assistant. Mr. Thorby had been an apprentice with John Bell, of Oxford Street, so that Mr. Hills received the right sort of training for what was to be his future career. Coming from Brighton to London, he got an engagement in Bell's firm as junior assistant. Henry Deano was just leaving, and Jacob Bell and John Mackay were seniors in the establishment at the time. A close and unvarying friendship linked these three—Bell, Mackay, and



Hills—to the end of their lives. Eight years after entering the establishment Mr. Hills became superintendent of the business, and seven years later was admitted a partner. This was before the death of John Bell, which occurred in 1849. Jacob Bell and Thomas Hyde Hills then became the joint



proprietors of the famous business. In 1859 Jacob Bell died, and left his share of the business—two-thirds, we believe—to Mr. Hills, who thus became the head of the house, after a service and association with it of almost exactly a quarter of a century.

Mr. Hills was the first associate of the Pharmaceutical Society, and he was elected to the Council in 1860, soon after the death of Jacob Bell; was vice-president to Mr. Sandford from 1863 to 1868, treasurer from 1868 to 1873, and president from 1873 to 1876. He was a faithful friend, and had the faculty of winning the affection and respect of all who came in contact with him. He contributed liberally towards the advancement of pharmaceutical education, and his endowments were as judicious as they were generous. He was buried on Wednesday at Maidstone, in the vault which contained the remains of his father and mother. A number of friends travelled from London, and were present at the funeral. Among these were Mr. Walter Hills, Mr. Samuel Gale, and Mr. J. R. Wretts, representing Messrs. John Bell & Co.; Mr. Thomas Woolner, R.A., Mr. G. D. Leslie, R.A., and Mr. George Pollock; the president, vice-president, treasurer, and secretary of the Pharmaceutical Society; Professors Atfield and Bentley, and among pharmaceutical friends and acquaintances were Messrs. Atkins (Salisbury), Greenish, Ekin, Giles, Gostling, Ince, Robbins, A. H. Mason, J. L. Barnard, Flux, G. S. Taylor, Fletcher (Cheltenham), Hardy, Thompson, Martindale, and Butt.

The following is from the pen of Edmund Yates in this week's *World*. We believe Mr. Yates is in error in saying that Jacob Bell left a large fortune as well as the Oxford Street business to Mr. Hills, though the share in the business was, no doubt, in itself a very handsome bequest. Mr. Yates writes:—"I note in last week's obituary a name pleasantly familiar to those moving in art circles twenty-five years ago, and never thought of without kindness and respect, and, in many cases, well-deserved gratitude. Mr. Thomas Hyde Hills to the world, Tom Hills to his familiars, was for many years the head of that widely-known and distinguished firm of pharmaceutical chemists, John Bell & Co., of Oxford Street. I have heard him say that when he came to London as a lad, determined to attach himself to one of the great firms, he left it to chance to decide whether he should go to Bell's or Corbryn's; chance gave the verdict, happily for him, to the former house, for in Jacob Bell, then the head of the establishment, he found his warmest friend. Mr. Jacob Bell, a man of large wealth, was at that time a munificent patron of art; he was the intimate ally of Edwin Landseer, to whom he gave some of his largest commissions; of Rosa Bonheur, and of a large number of Academicians of the day. When he died he left the business and a large fortune to Hills, who had for some time been his *alter ego*, and who, to

a certain extent, stepped into his benefactor's shoes. Nearly all Bell's art friendships were continued by his successor, who had already become closely connected with Landseer, to whom he acted as business adviser, and finally as executor; with Millais, who painted a wonderful slap-dash full-length portrait of his friend, with, I believe, only one sitting; with Frith, Hart, Mulready, and other lights of that time. In his prime Tom Hills was the kindest and most hospitable of men, but, unfortunately, on him 'the stage darkened ere the curtain fell,' and for several years he had been secluded from the world, suffering from softening of the brain, attended with incessant and never-wearying affection by his old and intimate friend, Sir Richard Quain. The end came on Thursday last, and was, in every sense, a happy release."

LEGGOTT.—On November 13, Mr. William Leggott, chemist and druggist, Bridge Street, Goole. Aged 58.

WILBY.—On November 11, Mr. George Wilby, chemist and druggist, Middleton Road, Banbury. Aged 45.

### Trade Notes.

MR. F. G. CURTIS, pharmaceutical chemist, has purchased the business until lately carried on by Hayles Bros. at 7 The Broadway, Ealing, W.

THE Guy's Tonic Company announce an advance in the price of their speciality from 21s. to 24s. per dozen net, and of the Guy's fruit pills from 8s. to 10s. 6d. per dozen net.

MESSRS. LEATH & ROSS have opened a branch homœopathic pharmacy at 4 Fitzjohn's Esplanade, Finchley Road, Hampstead, one of the new aristocratic quarters of London.

THE "Pyn-Ka" polishing-tablet is a rongey tablet with a slightly saponaceous base which answers excellently for polishing all kinds of metal articles. The makers, a Liverpool syndicate, declare that they mean "Pyn-Ka" to become a household word.

A NINTH EDITION of the Sanitas Company's pamphlet on the history and uses of their "Sanitas" products has just been published. The company now manufacture over thirty varieties of the combinations of their patent fluid, and in this 80-page pamphlet they give full particulars of all of these, and much information as to the purposes for which each can be used.

MESSRS. LYNCH & Co., Aldersgate Street, E.C., are putting up a eucalyptus and stramonium asthma-cure to retail at 1s. It is in oval tin-boxes, plainly but neatly finished off, and when used by burning it is said to be very effective. The article is so put up that the retailer can undo the parcel and put his own name upon the label, or the name and address are printed on orders of a gross. It is a seasonable speciality which deserves attention.

MESSRS. WILCOX & Co., 233 Oxford Street, W., have issued 10,000 post-cards to medical men and chemists in regard to Chapoteaut's Morrhual-Creosote. This is rather an opportune moment for such action, as creosote and its derivatives are now as popular as anything else in the cure of consumption. In Chapoteaut's preparation the active principle of creosote, gnaicol, is associated with morrhual, there being 15 centigr. of the latter and 5 centigr. of gnaicol in each perle. It is unnecessary to describe them, as Messrs. Wilcox & Co. wish chemists to apply for samples.

THE Chemists' Aërated Waters and Mineral Waters Association (Limited), referring to our report of their annual meeting last week, ask us to state that the chairman, in saying that the company, having stopped issuing shares, was in a rather peculiar position, meant to imply that the peculiarity consisted in the share-list being kept open so long. Mr. Davenport, in replying to Mr. Long, also said there was no reserve fund. It is the case that there is no cash reserve fund, but there is, we are told, practically a reserve of 6,218l. 2s. 8d. in the bottles and cases account. The company last week distributed to all the staff a week's wages as bonus, as resolved some time since by the directors.



W. B. FORDHAM & CO. (LIMITED), of King's Cross, are supplying an unusually cheap line of "Pine Tissue" toilet-paper. It appears to be a wood-pulp paper, and is no doubt, as it is claimed to be, "absolutely pure."

**ARMOUR'S DIGESTIVE FERMENTS.**—It was a little astonishing to hear, in the recent discussion on the importation of foreign chemicals, how speaker after speaker, in very decided terms, referred to the reliability of American pepsin. It was not difficult to gather what product they had in mind, reference to the slaughter of about 2,000,000 pigs annually taking one naturally to Chicago, where Messrs. Armour & Co., after many years devoted to producing tinned meats and cured pork, have turned their attention to the utilisation of the by-products. In manufacturing pepsin, pancreatin, and similar preparations, it is obvious that Messrs. Armour & Co. have peculiar advantages, since they can work up the raw material while the peptic juices are in the natural condition—or as near that as the absence of life will allow. It is only within the last few months that the firm have introduced their digestive products into the English market, and they appear to be repeating here what they have done in the United States—viz., taken to supplying all the reputed makers and distributors of pepsin and similar products. It was, therefore, with an unusual degree of interest that we examined the specimens which Mr. A. Meeker, manager of the London depot (59 and 60 Tooley Street, S.E.), submitted to us. Without recording the results obtained with the whole of the series examined, we may refer somewhat fully to the characters of the scale pepsin. This is a hygroscopic substance in thin scales, pale amber in colour, with a slight "peptic," but not disagreeable, odour, and perfectly soluble in distilled water. It is stated to digest 2,500 times its weight of coagulated albumen in five to six hours. In an experiment, 300 grains of albumen, coagulated as suggested by Dr. Eccles, was mixed with 5 oz. of water, acidulated with hydrochloric acid, and to this a fluid drachm of a 1-grain-to-1-oz. solution of scale pepsin was added. Digestion proceeded very rapidly at 52–54° C., and in two-and-a-half hours scarcely 20 grains of the albumen remained undissolved. The biuret reaction was given distinctly, showing that we were not dealing with a case of mere solution, but of peptonisation. The scale pepsin is intended for making liquid preparations of the ferment, such as pepsin wine, and for the same purpose the glycerole of pepsin may be used. Ten minims of this represent 1 grain of pepsin. We have had very satisfactory results with this product, but it is somewhat strong for dispensing as glycerine of pepsin, and we suggest that the following formula, or one similar to it, should be adopted by dispensers:—

Glycerole of pepsin .. ..	1½ oz.
Dilute hydrochloric acid .. ..	30 minims
Spirit of nitrous ether .. ..	40 "
Glycerine .. ..	2½ oz.
Chloroform-water to .. ..	6 "

Mix.

A teaspoonful of this, equal to 1½ grain of pepsin, is sufficient for a dose. For dispensing in powder form, Messrs. Armour & Co. also supply a powdered pepsin, which is permanent in the air, and of great activity. Their manufactures also include pancreatin in powder and tablets, and a useful rennet glycerole, which is an exceedingly convenient form for the preparation of essence of rennet.

## BANKRUPTCY REPORTS.

*Re* JAMES AENEAS SEYS, Newport (Mon.), Chemist and Druggist.

THE public examination of this debtor took place at the Newport Bankruptcy Court, on November 19, before Mr. H. J. Davis, Registrar. In answer to the Official Receiver, the debtor stated that he commenced business at Cheltenham in 1868, and three years subsequently removed to Newport, purchasing for 900*l.* the goodwill and stock and furniture of the late Mr. Abraham Clements. For many years the business was a paying one, but six years ago he was ill for twelve months, and this, together with the competition by grocers

and stores in the sale of patent medicines, caused business to fall off very considerably. He borrowed money of his wife, mother, and aunt, and these sums, amounting together to 800*l.*, had not been repaid. He had been in difficulties for perhaps two years, and on October 19 last became aware of his insolvency on being served with a writ for 140*l.* 15*s.* 4*d.* The rent of the shop and premises under the lease was 100*l.* and the shelling into offices of the rest of the premises brought in an income of 171*l.*, but he had to pay this sum to Messrs. Morgan, Francis, and Stanton, solicitors, Chepstow, on a mortgage. Although he had the shop rent free, he had to rent a house to live in. The sums he owed to his mother and aunt were included in the liabilities, but not the 400*l.* lent by his wife. The total liabilities were 2,403*l.*, of which 2,086*l.* was expected to rank for dividend. Assets, valued at 445*l.* 8*s.* 5*d.*, were stated to consist of cash, 2*l.* 8*s.*; stock-in-trade (cost 300*l.*), 250*l.*; fixtures, &c., 50*l.*; furniture, 50*l.*; book-debts, estimated to produce 93*l.* 0*s.* 5*d.* On the application of the Official Receiver the Registrar directed the debtor to file a deficiency account, and the examination was adjourned.

The first meeting of the creditors in this bankruptcy was held in London, on November 20, before Mr. G. L. Llewellyn, Official Receiver. No proposal was submitted to the creditors, and resolutions were passed to wind up the estate in bankruptcy, with Mr. A. B. Creivilye, chartered accountant, Newport, acting as trustee, assisted by the following committee of inspection, viz.:—Mr. J. P. Quick (Barclay & Sons, Limited), 95 Farringdon Street, London; Mr. John Young (secretary of the Newport Discount Co.); and Mr. T. P. Garrett, chemist, Newport.

The following are the principal creditors, viz.:—

Unsecured:—	£	s.	d.
Barclay & Sons (Lim.), 95 Farringdon Street, E.C.	145	2	11
Barron, Harveys & Co., Giltspur Street, E.C.	32	0	9
Boord & Son, Bartholomew Close, E.C.	23	17	10
Brewer, Dr., Newport .. ..	10	0	0
Cooper, William, & Nephew, Berkhamstead ..	11	17	4
Corbyn, Stacey & Co., 300 High Holborn, W.C.	23	17	6
Evans, Lescher & Webb, 60 Bartholomew Close, E.C.	64	1	0
Fox, F. T., Bristol .. ..	33	19	11
Haywood, J. H., Nottingham .. ..	14	17	8
Heaton, Smith & Co., Bristol .. ..	27	18	6
Horniman, W. H., & Co., Wormwood Street, E.C.	10	5	0
Kinmond & Co., Leamington .. ..	81	8	0
Lance, J., & Co., Cheltenham .. ..	12	8	8
Louden & Provincial Banking Co. (Lim.), Newport	284	15	9
Maw, Son & Thompson, Aldersgate Street, E.C.	75	5	6
Reynolds & Co. (Limited), Newport .. ..	10	13	2
Seys, Miss S. A., Triggwilyn .. ..	206	13	4
Seys, Mrs. A., Newport .. ..	525	0	0
Sharp Brothers, Southampton Row, W.C.	14	17	0
Smith & Co., Borough, S.E. .. ..	12	2	5
Williams & Co., Newport .. ..	80	16	8
Wills, W. D. & H. O., Bristol .. ..	37	6	10

Secured:—

Llewellyn, Mrs., Newport .. ..	20	15	0
Morgan, Francis, & Stanton, Chepstow .. ..	140	0	0

List E. Liability:—

Simon, D., Newport .. ..	30	0	0
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Preferential:—

Jones, Mrs., Newport .. ..	100	0	0
Smith & Co., Newport .. ..	13	16	0

*Re* WILLIAM KELSEY, Town End, Barnsley, formerly carrying on business as a Chemist.

AT the Barnsley Bankruptcy Court, on November 19, this debtor applied for his discharge. He commenced business in 1880 as a patent-medicine vendor, with practically no capital.

Mr. John Carrington, solicitor, informed his Honour Judge Bedwell that the debtor became bankrupt in August, 1889. The Official Receiver's report had been satisfactory, and the creditors had received a dividend of 9*s.* 2*d.* in the pound.

Mr. W. E. Clegg, on behalf of the Official Receiver, offered no objection to the discharge being granted.

His Honour said that the debtor had not kept proper books, and he must put on some suspension, in order to teach men that it was absolutely necessary for them to keep proper books.



Mr. Carrington observed that the debtor was now managing a chemist's shop at Grange-over-Sands.

His Honour granted the discharge, but suspended it for two months.

THE MIDDLEWICK SALT AND ALKALI CO. (LIMITED).  
—MEETING OF CREDITORS AND SHAREHOLDERS.

THIS company was formed in November, 1890, to acquire 23 acres of freehold land at Newton-by-Middlewick with the salt deposits and other minerals underlying, and to erect thereon works for raising and manufacturing salt and alkali. The purchase-price was fixed at 60,000*l.*, payable in cash, shares, and debentures. The nominal capital of the company was 80,000*l.*, divided into 16,000 shares of 5*l.* each, but the directors went to allotment upon a total subscription of about 17,000*l.* A winding-up order was made against the company last September upon a creditor's petition, and accounts have been furnished showing unsecured debts, 274*l.* 0*s.* 6*d.*; loans on debenture bonds, 13,100*l.*; assets valued at 6,192*l.* 10*s.*; and a deficiency to the contributories of 57,046*l.* 10*s.* 6*d.* The insolvency of the company is attributed to want of capital owing to the original directors having proceeded to allotment on an insufficient subscription. The deficiency is mainly explained by depreciation in the value of the property, returned at 55,020*l.* The creditors and shareholders met in London on November 20, before Mr. C. J. Stewart, Official Receiver. The chairman said that though notices had been sent to the directors only Mr. Clarke appeared, and the others had not sent letters explaining their absence. A gentleman suggested that the absence of Mr. Clovis, a director, was no doubt due to the fact that the funeral of his father, Prince Lucien Bonaparte, was to be held that day at Kensal Green. The chairman said the directors went to allotment upon a share and debenture capital which only left 2,000*l.* for working expenses. To use a mild term the directors had been grossly negligent, and it certainly appeared necessary that they should be called upon oath to explain their conduct.

Mr. Benjamin Crowther, manufacturing chemist and dry-salter, of Gomersal, said he was induced to take 500 5*l.* shares in the company. From its very inception it had been misrepresented. The prospectus gave a favourable report of the brine-well by an expert and referred to the use of a steam-pump. He had been on the premises in company with other shareholders and had tried the brine, with the result that they found it did not justify the report; and as to a steam-pump, he had seen no sign of any such engine. In his opinion the matter called for a searching investigation. (Hear, hear.)

Mr. Clarke said the expert sent a report to him as the vendor to the company, but unfortunately that document was lost. He obtained another, which, however it appeared, was in his belief an exact copy of the first. There certainly had been a steam-engine in operation. In reply to the chairman, who asked Mr. Clarke to explain how it was the directors went to allotment upon the scanty subscription of 17,000*l.*, Mr. Clarke said he was not concerned with the allotment as he refused to join the board until afterwards. He emphatically disclaimed having largely benefited by the promotion of the company, as he only drew about sufficient to pay off the mortgage upon the property.

It was agreed to apply for a sitting for the public examination of the parties concerned in the promotion of the company.

Re THOMAS CHARLES CROSS, 3 Lambeth Hill, Queen Victoria Street, E.C., Trade Printer.

THIS debtor, who failed recently with total liabilities 2,210*l.* 11*s.* 6*d.* (unsecured, 1,384*l.* 19*s.*), and assets 1,129*l.* 18*s.* 6*d.*, attended last Wednesday at the London Bankruptcy Court, before Mr. Registrar Giffard, for public examination. In the course of his examination by Mr. Grey, Assistant Receiver, the debtor stated he was a chemist and druggist's printer, and commenced business in 1866 in partnership with a Mr. Bowles, witness introducing a capital of 500*l.* Mr. Bowles died in 1871, and witness paid the widow between 600*l.* and 700*l.* as representing her late husband's interest in the business. He subsequently continued to trade under the same style (Bowles & Cross), and

with comparative success until recently, when he discovered that he had been robbed. He was then compelled to borrow money to enable him to meet his engagements. Pressure was recently applied by creditors, and, upon an execution being levied, he sought the protection of the Court. The examination was ordered to be concluded.

Re THOMAS HENRY TYRRELL, Luton, Chemist.

THE public examination of this debtor was held at the Luton Bankruptcy Court, before the Registrar (R. Coake, Esq.), on November 24. The gross liabilities are 965*l.* 11*s.* 3*d.*, of which 433*l.* 11*s.* 3*d.* are expected to rank for dividend, and the assets are nil. The unsecured creditors above 10*l.* are to builders, &c., and do not include any trade-debts.

In reply to the Official Receiver, the debtor said he began business twenty-seven years ago with 200*l.* of his own money. His creditors only included about 40*l.* for goods supplied, the rest of the liabilities being in connection with certain property transactions. Had not kept any books, or made a balance-sheet, or ascertained the state of his affairs. Was first aware of his insolvency when Reynolds & Eason got judgment against him. If he had won should not have been insolvent. Thought it was subsequently that he made assignments of his property. On October 16, 1890, assigned his stock-in-trade, fixtures, fittings, and goodwill to his son in consideration of 101*l.* paid by him on his (witness's) behalf.

You could not have been solvent at that time?—I think so.

How could you pay the 101*l.*? The sheriff was in possession.—He was; I did not pay it.

Then you were not solvent on that date anyhow?—I suppose you may put it so.

When Reynolds & Eason had just begun their action he transferred the property to his son by bill of sale. His son was a musician, and helped him in his business in the day-time. His son got the 101*l.* from his friends—borrowing it. In consideration of that sum he handed over the stock, &c., to him. Since then had been in the shop just the same. His son's name was Thomas Tyrrell, and his own Thomas Henry Tyrrell. T. Tyrrell had been over the shop, and was now. There was no change. Nothing to tell anybody of a change except the registration of the bill of sale.

It further appeared that debtor had transferred his furniture to his wife in consideration of money previously advanced. This transfer was made before the action of Reynolds & Eason was commenced or threatened. He could not remember the exact date. It was not October 16, 1890. He believed he owed something under 1,000*l.* to his wife, for money advanced from time to time. Had no account of it. Did not see he was, in consequence of that debt, insolvent at the time. It would not be like a debt contracted with a stranger. In answer to further questions witness said his son was twenty-eight. Had not been employed away from witness, but had his own business to attend to. From the shop witness drew what the business would afford.

Are you not just as much in power there now and in proprietary right as ever?—I have no proprietary right in the business.

Drawing is not the action of a servant, but of a master; is he your master or not?—He is proprietor of the business.

Is he master?—He is.

And you man?—Certainly.

What salary do you have?—It is not a fixed salary, I tell you; it would not be in a business the profits of which are uncertain.

Would you go to anyone else in that way?—He is my son. I should deal differently with a stranger.

His drawings depended on the profits. Could tell them roughly by the takings, which now were very small. They might average between 2*l.* and 3*l.* a week. His business had always been a small ready-money business, and he did not feel there was any necessity for entering it in books. Since the receiving order had kept an account for the Official Receiver. As to the stock, &c., seized by the sheriff, he did not think 101*l.* a low computation. When the business was transferred there was no valuation. Could not tell what stock he had. He would rather have sold it to a stranger than to his son.

There were other questions, in reference to the leasehold transactions, and the examination was adjourned.





*Notice to Retail Buyers:—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.*

*It should also be recollected that for many articles the range of quality is very wide.*

The first pages of this report deal with the markets up to Wednesday evening. Our reports of Thursday's sales and the latest information are appended under a distinctive heading.

**TARTARIC ACID QUOTATIONS.**—In our last issue we quoted the price of tartaric acid correctly at 1s. 1d. to 1s. 1½d. per lb. We added a sentence to the effect that we were assured "from another quarter that German brands are being offered in the provinces at 11½d. per lb., usual terms, without finding buyers, as it is said that French importers are selling at still cheaper rates." It will be observed that we expressly gave the statement for what it was worth, and did not affirm or deny its accuracy. Our note-book showed distinctly that the price we quoted was actually given to us, and by a dealer who could certainly have no interest in depreciating the article. Moreover, tartaric acid has been in such a position lately that a decline such as the lowest quotation would involve, though remarkable, could not be said to have been altogether impossible. Nevertheless, the paragraph was regarded by several prominent dealers in the article as prejudicial to their interests, and they sent us the following letter:—

SIR,—We, the undersigned, some of the principal dealers in tartaric acid on this market, beg to protest against the unreliable report contained in this week's issue of your paper, and we think you should either inform your readers from whom the information emanates, or correct the report at once, as its gross inaccuracy causes serious loss and annoyance.—We are, Sir, yours truly, WALTER J. CHOOK, W. C. BACON & CO., MIDDLETON, KIRKPATRICK & BARR, W. CAUDERY & CO., C. CHRISTOPHERSON & CO.

Our informant does not wish us to give his name. He admits that he gave us the quotation we published, but states that he did so in error, and should have said 12½d., instead of 11½d. per lb. We think the firms who signed the letter to us are in fairness entitled to this qualification of our paragraph.

**NEW ALKALI COMPETITION FROM MANY QUARTERS.**—It seems that the United Alkali Company will have to reckon on a good deal of opposition in the manufacture of chemicals ere long. Very shortly a new chemical company will be formed on Tyneside, to carry on the production of bleaching-powder, soda ash, and soda crystals, at the factory formerly owned by Messrs. R. Imeary & Co., at Heworth Shore. The company, we understand, will shortly be registered, with a capital of 60,000l. in 10l. shares. The principal shareholders are men of influence in the commercial world, and it is thought that the present position of the trade is very suitable for commencing an independent works outside the Chemical Union. The existing plant will be replaced by all the latest improvements in machinery and labour-saving appliances. There is an extensive river frontage at the works for receiving raw materials, &c., and the shipping of finished products. It is expected that the works will be able to produce 75 tons bleaching-powder weekly, with the corresponding quantities of soda products.

Mr. J. C. Rollin, late secretary of the St. Bede Chemical Company, who has had many years' experience in the chemical trade, will act as managing director. Owing to the extensive alterations necessary in the plant, six or eight months must elapse before the new works will be able to compete in the market. Quite recently new chemical-works have been started at Northwich for the manufacture of alkali by the ammonia process. Preparations are also being made for the extension of the plant of a London firm, who intend adding the production of bleaching-powder to their present manufactures. There is also some talk of starting works near London for the manufacture of soda crystals for the London market. It is reported that a new chemical-works will be started at Irvine, in the West of Scotland, for the manufacture of caustic soda and bleaching-powder. Altogether, the opposition to the United Alkali Company from outsiders is likely to be as severe as the opposition experienced by the Salt Union.

**JAPANESE REFINED CAMPHOR.**—In a recent issue we mentioned that a "Japan Camphor Company" had been constituted in the United States. Our American exchanges received this week contain further particulars of this company. Two of its founders are American camphor-refiners, and the two remaining refiners in that country may possibly, we gather, join the concern later. The machinery was shipped from the States to Japan two years ago, and the plant is now in operation and ready for business. The original intention was to supply Europe almost exclusively; but the prospects favour exports to the United States also, although there is a duty of 4s. per lb. on the article. This may mean a curtailment of production in America. The parties interested in the company are said to be in a position to control supplies of crude camphor, being right at the source of supply. The American managers, however, disclaim any knowledge of an intention to concentrate stocks or to advance the market. They say that the company was organised in order to prevent the dictation to which consumers [in the States?] have been subjected by the French and English manufacturers, who corner the market at frequent intervals. At such times the Americans are almost entirely at the mercy of the speculators, and are compelled to pay the highest figures. Almost simultaneously with this company, another refining concern commenced important operations in Japan. It has endeavoured to market refined camphor in America, and shipments have also been made to Hamburg and London.

**THE POSITION OF ERGOT OF RYE.**—Mr. John Moss sends us an advance proof of a circular he is about to issue on the present position of ergot of rye. After referring to the Russian ukase prohibiting the exportation of rye (which, of course, did not include ergot), he continues:—"Normal weather means normal proportions of rye and of ergot. If the weather be humid and warm (said to favour the development of the ergotising fungus) ergot will be greater than usual in proportion to the rye produced, and shortness of the general crop will not be so apparent in a short supply of ergot. If, on the contrary, the weather be dry and parching, a state of things obtains unfavourable both to rye and to ergot, and a scarcity of the latter follows even greater than is proportional to the shortness of rye. When the rye itself is so scarce as to mean famine to the natives of the stricken country, how is the normal demand for ergot to be supplied?"

"According to the usual reports, a protracted dry burning drought following the intense cold of spring has been the rule in the rye districts of Central and Southern Russia through the summer of this year; even the grass is dried up. The result is so little rye that the country cannot afford to sell any, and must, indeed, buy grain enormously in order to mitigate the horrors of a famine. The production of ergot must be correspondingly short. Two weeks ago we were told that Russia could send no more, that her stock was exhausted, and no forward sales could be made. The demand that Russia could not supply has therefore been more persistently directed towards Spain, with the result that she also is drained, and no more is reported as coming forward. The other countries mentioned produce but little;



though Italy has offered her stumpy grains more freely than usual on the London market. There being yet ten months before any further supply is possible, the outlook is not promising, and more moderate prices are quite out of view. Large buyers like the United States may, indeed, exercise so disturbing an influence on this market as to intensify the dearth of ergot which seems imminent. Consumers would do well, therefore, to look ahead, and if they are so fortunate as to hold ergot, not to let go what they may require within the next nine or ten months."

**ACID (CITRIC).**—The market remains quiet at 1s. 4½d. on the spot and 1s. 4½d. per lb. forward. Juice is reported dearer from Sicily at 19l. 5s. f.o.b.

**ACID (TARTARIC).**—A sluggish market at 12½d. to 1s. 1d. per lb. nearest price.

**CHILLIES.**—Zanzibar chillies are steady with sales of about 50 bales at auction at 50s. to 53s. 6d. per cwt. for medium to fair. About 80 bales small red Madras *Capsicums*, free from stalk, brought 26s. per cwt.

**CUMIN-SEED.**—*Malta* seed is again dearer, and quoted at 36s. to 40s. per cwt., according to quality. *Mogadore* seed is also advancing, and held firmly at 22s. 6d. per cwt. for good quality.

**ERGOT OF RYE.**—Still increasing in price. We hear that 2s. 7d. per lb. has been paid privately this week for good Spanish on the spot. Under date of November 14 the position of ergot on the New York market is described as follows:—"Ergot is steadily hardening under increasing scarcity, and holders are not disposed to part with round lots except at extreme figures. There have been further sales of about 3,500 lbs. this week, the result of a cleaning-up process for the purpose of securing the stock in outside hands. The quotation is from 52½c. to 60c. per lb."

**FENNEL-SEED.**—Good bright East Indian is reported to have sold privately at 21s. 6d. per cwt. Part of the supply which was recently withdrawn from auction will be offered again to-day.

**FENUGREEK-SEED.**—This article has partly recovered its recent decline, and is now quoted at 11s. to 11s. 6d. per cwt. for good *Mogadore*, with a considerable amount of business at from 10s. 6d. to 11s. per cwt.

**FULLER'S EARTH.**—The manufacturers, who, with few exceptions, have until recently formed an association for the maintenance of uniform prices, have lately again commenced to undersell one another, with the result that prices have fallen rapidly. Best ground earth in impalpable powder has been offering at 5l. 10s. per ton, and is now quoted as low as 5l. per ton.

**GALLS (CHINA).**—There have been rather large sales at 50s. 6d. per cwt., "c.i.f." terms, after which owners raised their prices slightly. The nearest quotation now is 51s. per cwt. "c.i.f."

**GALLS (TURKEY).**—Blue galls are again quoted at higher prices, as much as 70s. per cwt. being now asked for fine *Bassorah*. Green and white galls are held too firmly to admit of business—viz., at 55s. and 50s. per cwt. respectively for good quality. In *Smyrna* galls there is nothing offering at present. For *Morca* 25s. to 27s. 6d. per cwt. is required.

**GINGER.**—The demand for Cochin ginger has continued, and at the close of last week sales were reported to have taken place privately at 30s. per cwt. for cuttings, 36s. for rough D, 55s. for C cut, and 70s. for B cut. Early this week further considerable quantities sold at higher rates—viz., up to 38s. for rough D. Sales also took place in *Bengal* ginger at 30s. per cwt. The firm tone was well maintained at the auctions, although about 400 packages *Cochin* ginger which were offered were nearly all bought in, owing to the exaggerated views of the holders. *Jamaica* ginger is about 3s. dearer, good common selling at 48s. 6d., and low medium to medium dull washed at 54s. 6d. to 61s. per cwt. Eighty-two bales *Japan* ginger (1889 import) realised 36s. 6d. to 38s. for plump, and 38s. 6d. to 39s. for sliced root.

**GUM ARABIC.**—Turkey sorts are rather dull of sale at prices running up to 6l. 15s. per cwt. for good pale quality.

Small pale Mecca sorts sold recently at 75s. to 77s. per cwt. *Persian* gum in good supply at low prices—viz., from 15s. for common blocky to 30s. for pale but insoluble. It is reported that a large quantity of gum arabic has lately been shipped directly from Egypt to the United States, and that for that reason America is buying less in our markets now than usual.

**GUM TRAGACANTH.**—A strong market, with small supplies, especially of *Smyrna* gums, which are quoted at 11l. to 12l. per cwt. for first quality. Fine pale first *Bagdad* gum has been sold at 10l. 10s. per cwt. this week. In *Smyrna*—so our mail reports say—the advance in tragacanth is still progressing, while there are many buyers in the market. The local quotations are at the parity of 13l. 10s. for selected white and 10l. 15s. for white gum.

**MERCURIALS.**—Notwithstanding the fact that the English mercurial makers (as some of them assured us) did not on Thursday last contemplate the issue of a further announcement with regard to the prices of mercurials, they issued a notification on Saturday to the effect that their prices for total quantities of 1 cwt. and upwards were, for calomel, 2s. 10d.; white and red precipitate, 2s. 11d.; and corrosive sublimate, 2s. 5d. per lb. The agents for the French makers have made no further move up till this evening, but they tell us that they are considering the policy of a further reduction.

**OIL (CASTOR).**—The Liverpool market is dull and lower, with sales of good second quality Calcutta oil at 3½d., subsequently declining to 2½d. per lb. First-pressure *French* oil is still quoted at 2½d. per lb. The Calcutta market, according to reports dated November 4, has declined somewhat, and at the reduced rates a fair amount of business was transacted.

**OPIUM.**—The London market is steady, with a somewhat limited business. Prices show no alteration this week. *Soft shipping* is quoted at 9s. to 10s. 6d. per lb., according to quality. Second *Druggist's* sorts at 7s. to 8s. per lb. *Persian* opium has been sold at somewhat easier rates, from 8s. to 9s. 6d. per lb. being the present quotation. We are in possession of the following from *Smyrna*, dated November 14:—Our market keeps very firm indeed, and all buyers have made purchases. The total sales since the beginning of the month are 113 baskets. Fine *Yerli* and talequale *Karahissar* kinds, which were cheap in comparison to other kinds, have advanced considerably. The actual condition of the article is strong, and there is every prospect that quotations may be maintained, or may even rise still further. The Dutch Government have bought standard qualities at the rate of 8s. 4d.; Constantinople houses have taken 20 cases talequale *Karahissar* of good appearance at 7s. 7d.; America bought new current *Yerli* talequale at 7s. 11d. The arrivals up to date are 2,740 baskets, against 1,350 last season. From the interior news reaches us to the effect that the new sowings have taken place, favoured by abundant rains, but that in many districts cereals have taken the place of opium this season, owing to the high prices realised by corn. It is estimated that the acreage under opium is about 25 per cent. less in Asia Minor, and 30 per cent. less in the Salonica district, than it has been in average years.

**QUICKSILVER.**—Very sluggish. The importers' price is nominal: seconds may be had at 7l. 13s. per bottle.

**QUININE** has remained exceedingly neglected this week. There are second-hand sellers of German in bulk at 9½d. per oz.

**SALEP** is quoted at 7l. to 8l. per cwt. nominally, but it is doubtful whether there is any stock here.

**SCAMMONY-ROOT.**—The market is now cleared of all parcels in the first hand. *Scammony* and *Scammony-resin* are very slow of sale in all except fine qualities.

**SHELLAC.**—Last week the market closed somewhat stronger after the decline caused by the heavy shipments from Calcutta, and the offering for sale at the auctions, without reserve, of an unusually large quantity. A sale of 100 cases *Orange TN*, December delivery, was made at 94s. per cwt., after which holders refused to proceed below 95s. per cwt. In anticipation of the weekly auctions, the spot market remained quiet on Monday. For delivery December *TN* sold at 95s.; and January



ditto at 96s. per cwt., showing a slight recovery. Tuesday's auctions were again exceedingly heavy. They comprised 1,454 cases, of which about 450 cases were offered without reserve. Altogether 604 cases sold at very firm and occasionally slightly dearer rates for *Orange* and *Garnet* lacs, while *Button* went from 1s to 2s. per cwt. lower. The following prices were paid. *Orange* lac, fairly good bright to reddish seconds, 92s. to 93s.; ordinary to fair cakey ditto, 89s. to 92s. per cwt. *Garnet*, good flat unworked, 96s. per cwt. *Button*, cakey firsts, 89s. to 90s.; fair seconds, 88s.; thirds, 81s. to 82s.; dark and blocky down to 77s. per cwt. For delivery the market made some further recovery. 95s. to 95s. 6d. being paid for December, and 96s. to 97s. for January.

**TURMERIC.**—All varieties are strongly held, especially *Bengal*, which is not obtainable any longer below 19s. 6d. to 20s. per cwt. on the spot. At auction 121 bags *Chinese* root were bought in at 30s. per cwt., and a parcel of fair *Bengal* at 20s. per cwt.

**VANILLA.**—On October 23, when the first arrivals had been received from up-country, the new vanilla crop in Mauritius was estimated at about 28,500 lbs.

**WAX (BEES').**—There has been a strong demand for Chilian wax in Liverpool at higher prices.

### CHEMICALS IN THE NORTH OF ENGLAND.

**THE** market for heavy chemicals at both Liverpool and Newcastle is generally quiet, with prices, on the whole, ruling steady. *Sulphate of Copper* is flat, and *Caustic Soda* has been reduced by the union simultaneously at both the Liverpool and Newcastle centres.

**BLEACHING-POWDER** continues firm at 7l. 5s. per ton in softwood, and 7l. 10s. per ton in hardwood casks, f.o.b. Tyne. For delivery on rails at makers' works, Widnes and St. Helens, makers quote 7l. 5s. per ton in softwood casks, and 5s. per ton extra delivered f.o.b. Liverpool. Hardwood casks are quoted 7l. 15s. per ton, f.o.b. Liverpool, with 10s. per ton extra for American shipment.

**CAUSTIC SODA.**—A quiet market, and prices of all strengths reduced from 7s. 6d. to 10s. per ton, according to strength; 77-per-cent. white is now quoted 11l. 10s. per ton, and 70-per-cent., 10l. 5s. per ton, f.o.b. Tyne. Liverpool prices are as follows:—60-per-cent. white, 9l. 2s. 6d. per ton, and 70-per-cent. 10l. 5s. per ton; 60-62-per-cent. cream is quoted 8l. 17s. 6d. per ton, f.o.b. Liverpool, with an allowance of 2s. 6d. per ton if delivery is taken at makers' works.

**CHLORATE OF POTASH.**—Firm at 5<sup>3</sup>/<sub>4</sub>d. per lb., less 5 per cent., f.o.b. Liverpool, and 5<sup>1</sup>/<sub>2</sub>d. per lb., less 6 per cent., f.o.b. Tyne.

**HYPOSULPHITE OF SODA.**—Very firm and in brisk demand. Packed in 1-cwt. kegs the price is 8l. per ton, and in casks 7l. 10s. per ton, f.o.b. Tyne; in 10 ton parcels, c.i.f. Liverpool, the price is 8l. in casks and 8l. 10s. in kegs, and 8l. 2s. 6d. and 8s. 12s. 6d. delivered Manchester.

**SODA ASH.**—A good business has been done for both prompt and forward delivery. *Carbonated*, 48-per-cent., 5l. 8s. 9d. per ton; 52-per-cent., 5l. 17s. 9d. per ton; and 56-per-cent., 6l. 6s. 9d. per ton, f.o.b. Tyne. *Caustic*: 48-per-cent., 5l. 6s. 3d. per ton; and 52-per-cent., 5l. 14s. 3d. per ton. *Carbonated*, 48-per-cent., 5l. 9s. 9d. per ton; 52-per-cent., 5l. 19s. per ton; and 58-per-cent., 6l. 12s. 9d. per ton, f.o.b. Liverpool. *Ammonia Process Alkali*: 58-per-cent. is quoted 6l. 12s. 6d. per ton, f.o.b. Liverpool prompt. Middlesborough make is offered over next year at 6l. 10s. per ton, f.o.b. Tees.

**SODA CRYSTALS** continue steady at 3l. 3s. 6d. per ton, in casks and bags for gross and net weights, f.o.b. Tyne, and 3l. 7s. 6d. per ton in bags, and 3l. 12s. 6d. per ton in casks, f.o.b. Liverpool.

**SULPHATE OF SODA.**—Unchanged, at 40s. per ton in bulk, and 50s. per ton ground and packed, f.o.b. Tyne. Liverpool prices are 40s. to 42s. 6d. per ton, in bulk, at makers' works, and 55s. per ton, ground, in casks, f.o.b. Liverpool.

**SULPHATE OF COPPER**—Flat, at 15l. per ton for prompt, and 15l. 15s. per ton quoted for forward delivery, f.o.b. Liverpool.

### THE SMYRNA OPIUM MARKET.

(Telegram from our Correspondent)

SMYRNA, November 24.

OUR market has been very active this week, and about 120 cases have changed hands, but prices show no alteration upon last Wednesday's—viz., 7s. 3d. f.o.b. for new crop Talequalic, 8s. 4d. f.o.b. for Yerli, and 8s. 3d. f.o.b. for Karahissar. The weather continues favourable for winter sowings.

## THURSDAY'S MARKET NEWS.

CANNON STREET, November 26.

**B**USINESS has been fairly steady this week, with some slight advances in the prices of several important articles and a recovery in others, such as shellac. To-day's drug sales were heavy, and did not commence until very late, large supplies of the new crop of vanilla blocking the way. The principal alteration at the auctions, and in the private market, may be summed up as follows:—In the department of drugs crop of rye is still advancing; fine dragon's-blood and benzoin were also much dearer to-day. Beeswax is higher all round. Ipecacuanha irregular, but with a firm tendency. Cumin-seed, fenugreek-seed, Turkey galls, calumba, and Mogadore orris all in better request. Musk, third pile pods, and civet are higher in price. Tinnevely senna realised full rates, and concentrated lemon-juice is reported much dearer to-day. On the other hand, we have to report lower prices for castor oil, Cape aloes, gamboge, and saffron; while cardamoms, vanilla, bchu, and crude camphor are perhaps not altogether so firm as they were last week. In fine chemicals refined camphor is the only one which shows an improvement. Quinine is very flat, and mercurials unsettled with a lower tendency. Turning now to the outside markets, we find alcohol still rising; several spices, notably ginger, chillies, pimento, and cloves, decidedly firmer. Tragacanth and turmeric somewhat higher, and shellac partly recovered from its last fall. On the other hand, sulphate of copper is flat, and indiarubber, fuller's earth, caustic soda, linseed oil, and cottseed oil are lower.

**CLOVE AUCTIONS IN ZANZIBAR.**—A Reuter's telegram from Zanzibar, dated November 21, announces that the first public auction-sale of cloves, subject to duty, was held there that day. There was a large attendance. Mr. Gerald Portal, the new British Consul-General, was present, and stated that it was hoped to make Zanzibar the centre of the trade of East Africa, and that it would probably be declared a free port for imports at the beginning of next year. Public sales of cloves will henceforth be held fortnightly. We understand that the spice trade here are quite in doubt of the results (if any should ensue) which this innovation may have upon the London market. London is now the largest centre for cloves, but yet, if our information is correct, the announcement that public sales had been instituted in Zanzibar came upon dealers here as a surprise. It is well known that the Sultan of Zanzibar derives a considerable proportion of his revenue from an export duty on cloves, and it is surmised that the bulk of the cloves offered by auction in Zanzibar may be those which are said to be sometimes tendered to the Sultan in lieu of cash by exporters. One of Mr. Portal's chief duties is thought to be the reorganisation of the finances of the Sultan, and it is probably in connection with this matter that the sales have been instituted.

**ACID (CITRIC).**—The price is unchanged, but there is a considerable rise in concentrated juice to-day. Sales are



reported at 19*l.* 15*s.* to 20*l.* f.o.b. Messina, and we believe that a small quantity is likely to find buyers to-day at 21*l.*

**ACONITE-ROOT.**—For a parcel of Japanese root offered to-day 18*s.* per cwt. was mentioned as the price: if that figure should really be accepted it would show a considerable decline in the value of the article.

**ALOES.**—*Cape* aloes are about 6*d.* to 1*s.* lower for good qualities, but more ordinary grades are almost unchanged. At auction to-day 92 packages were offered, of which 71 sold at 20*s.* to 21*s.* for good bright hard, and from 20*s.* down to 17*s.* for slightly to very drossy. Of *Curacao* aloes, 83 packages sold at 55*s.* to 60*s.* for fine bright livery, and from 11*s.* 6*d.* down to 8*s.* for common overheated. Fine *Socotrine* aloes are scarce, and realise good prices; among the lots offered to-day was one of 14 cases, which sold at 92*s.* 6*d.* to 95*s.* for slightly soft fine brown colour, 85*s.* for rather mixed partly fine colour, hard, imported ten years ago; and from 45*s.* down to 20*s.* for very skinny to common and adulterated. Good *Zanzibar* aloes are also scarce; fair treacle red, offered without reserve, sold to-day at 75*s.* per cwt.

**AMBERGRIS.**—Only one lot of black ambergris of fair flavour was sold to-day at 60*s.* per oz. Other lots were bought in, very fine grey being held, it is said, for 180*s.* A good demand is reported in good grey quality at between 140*s.* and 150*s.* per cwt.

**ANISE.**—*Russian* anise was bought in to-day at 25*s.* per cwt.; there were no bids for it: 35 bags ordinary *Italian* sold without reserve at 22*s.*, and 10 bags good *Spanish* (Alicante) at 25*s.* per cwt.

**ANNATTO** is selling at very cheap prices now. Eighteen bags good bright seed from Ceylon only realised 2*d.* per lb.; while for dark and common quality  $\frac{1}{2}$ *d.* to 1*d.* per lb. was accepted.

**ANTIMONY.**—It is said that there have been sales of crude Japanese antimony on the spot at 28*l.* to 29*l.* per ton. Now 30*l.* is the general quotation.

**BALSAM (COPAIBA).**—A parcel of 15 drums from Demerara, very thin and brown liquid balsam, is held for 1*s.* 8*d.* to 1*s.* 9*d.* per lb.

**BUCHU.**—Six bales fair round greenish leaves, rather strongly mixed with flowers, and a little stalky, sold at 5 $\frac{1}{2}$ *d.* to 5 $\frac{3}{4}$ *d.* per lb. to-day; for good quality 6 $\frac{1}{4}$ *d.* is asked. Competition still remains good. The sale mentioned in our recent quotation of 4 $\frac{1}{2}$ *d.* to 4 $\frac{3}{4}$ *d.* for ordinary stalky leaves did not actually take place, 5 $\frac{1}{2}$ *d.* being the lowest price paid at the last auctions; 2 bales very ordinary false long buchu (*Empleurum serrulatum*) were bought in to-day; there was no bid at 3*d.* per lb.

**CALABAR BEANS.**—Three bags sold to-day without reserve at 3 $\frac{3}{4}$ *d.* per lb.

**CALUMBA.**—The improved demand, of which we wrote recently, has continued since, and several sales are reported this week at full prices. At auction to-day only one parcel was offered, and bought in at 30*s.* per cwt. There has been an import of 89 packages.

**CAMPHOR (CRUDE).**—The market is firm, but there does not appear to be very much business passing. Japan, on the spot, is 135*s.*, and China, 130*s.* per cwt. We hear that there are offers from Japan to-day at 130*s.* per cwt., c.i.f. terms. If that is confirmed, it means a decline of about 4*s.* on the week.

**CAMPHOR (REFINED).**—The German refiners have to-day increased their quotations by  $\frac{1}{2}$ *d.* per lb., and now quote 1*s.* 6*d.*, net, one maker offering at 1*s.* 5 $\frac{1}{2}$ *d.* English and French camphor unchanged.

**CANTHARIDES.** *Russian* are a shade lower, 3 casks wormy selling to-day at 2*s.* 6*d.* to 2*s.* 7*d.* per lb.; for 5 cases fair China 1*s.* 1*d.* per lb. is asked: they were bought in at 1*s.* 3*d.*

**CARDAMOMS.**—About 120 cases were offered to-day, part of which was not reached when we went to press; only about 30 boxes had sold up to that time, at 2*s.* 6*d.* to 2*s.* 10*d.* for medium to good bold pale round Mysore, 1*s.* 11*d.* for smaller size ditto, 1*s.* 6*d.* to 1*s.* 7*d.* for small to medium fair pale,

1*s.* 11*d.* for good pale to partly split, 1*s.* 9*d.* for small to bold long thin and yellowish, 1*s.* 4*d.* for long round, and 1*s.* for ordinary stalky and brown mixed. Malabar realised 2*s.* 3*d.* for fair medium-size brownish round, 1*s.* 2*d.* for mixed sizes partly brown and split.

**CIVET.**—Prices have recently increased somewhat in value, and whereas until recently 7*s.* was the usual price for fair quality (6*s.* 6*d.* for large quantities), there is now no more to be had at that figure. At auction 8*s.* 6*d.* was asked for a parcel, but we believe there are cheaper lots in the market than that.

**COCA LEAVES.**—Eight bales good bright but broken green *Truxillo* leaves were bought in at 1*s.* 9*d.* per lb., and some very common brown leaves at 2*d.* per lb.

**COWHAGE.**—Very dull of sale and altogether neglected. Three tins of very dark colour were offered without reserve, but no bids were made for it. The nominal value of fair quality is about 1*d.* per oz.

**CREAM OF TARTAR** keeps steady at 94*s.* for best white French crystals.

**CUBES.**—Of 10 bags fair quality, but very stalky, 6 were sold at 8*l.* 10*s.*, which shows that the price is well maintained. Another lot was bought in.

**DRAGON'S BLOOD.**—Fine quality is very scarce, and of 4 cases offered to-day 1 sold at an advance of about 30*s.* per cwt., realising 11*l.* 10*s.* for fiery mixed somewhat crossy block. Of 9 cases finger, rather dull in colour, 2 sold at 6*l.* 10*s.*

**ERGOT OF RYE.**—Two packages fair round Spanish offered to-day sold at 2*s.* 7*d.* per lb. Another lot, consisting of 8 cases fine new Spanish was not actually offered. We hear that most holders now call the price 2*s.* 9*d.* per lb. Some wheat ergot is now offering from France; it appears in very short corms, nearly all of which could easily be detected if found mixed with ergot of rye; the price asked for the French article we hear named as from 2*s.* 2*d.* to 2*s.* 4*d.*

**FENNEL-SEED.**—About 200 bags were offered to-day, dark to good bright being held at 21*s.* to 23*s.* per cwt. Some damages sold at from 12*s.* to 18*s.*, according to qualities.

**GALLS.**—Two bags fine blue *Turkey* sold to-day at 72*s.* 6*d.* per cwt.

**GAMBOGE** shows a decided decline to-day. Of 11 cases offered only 3 were sold at a fall in value of from 15*s.* to 25*s.*; good native hand-picked, fair fracture but very broken, sold at 12*l.* 17*s.* 6*d.*; bold old pipe, very ricy and of little colour, at 10*l.* 2*s.* 6*d.* per cwt.

**GLYCERINE.**—The market is very flat at 43*s.* for second-hand double-distilled, s.g. 1.260.

**GUM AMMONIACUM.**—All qualities remain very scarce, and good gum realises exceedingly high prices; 2 cases fine loose yellow drop and grain mixed, slightly blocky and without much flavour, sold to-day at 103*s.* per cwt.; 5 other packages fair almond, but mixed with seed and wood and blocky, were bought in at from 60*s.* to 80*s.* per cwt. A parcel of 16 to 18 cases is just landing from Bombay, but the quality is not yet known.

**GUM ASAFETIDA.**—Fine qualities are scarce and inquired for, but common are difficult to sell. Sixty cases ordinary strong grey block, slightly pinky mixed, sold to-day at from 14*s.* 6*d.* to 16*s.* per cwt.

**GUM BENZOIN.**—Of Siam gum 34 packages were announced for sale, nearly half of which was not actually offered. Of the remainder, 10 cases sold with strong competition at an advance of from 4*l.* 10*s.* to 5*l.* 10*s.* per cwt. for the best grades, fine bold pale detached almonds realising 27*l.* 10*s.* to 28*l.* 10*s.*; medium size, 20*l.* to 21*l.*; small almonds, 15*l.* 10*s.*; and ditto, partly blocky mixed, 10*l.* 5*s.* per cwt. Sumatra gum in very good demand and dearer, though the finest lots sold at comparatively the lowest rates. Sumatra seconds of fine flavour, medium to bold bright almonds, slightly grey sides, brought 8*l.* 2*s.* 6*d.*; good pale centres, but somewhat false-packed corners, 7*l.* 7*s.* 6*d.* to 7*l.* 15*s.*; small almond centres, broad red sides, 7*l.*; and very small grey almonds, well packed, but mixed with bark, 6*l.* 7*s.* 6*d.* to 6*l.* 10*s.* per cwt. Palembang gum sold at 45*s.* for medium quality.



**GUM ELEMI.**—The price at which the 6 cases of Manila gum mentioned in our last drug report as sold should be 42s. per cwt. instead of 32s. At to-day's auctions 15 cases Manila of good flavour, but partly yellow in colour, were bought in at 50s. per cwt.

**GUM MYRRH.**—This article is becoming somewhat scarce. Of 20 barrels fair Aden sorts, 5 appear to be sold at 75s. per cwt.

**HONEY.**—In rather small supply and firmly held. Thick liquid brown *Jamaica* sold at 37s.; darker ditto at 34s. per cwt.; 8 cases *Australian* honey, thick candied, and of rather dull colour were held at 35s. per cwt., an offer of 30s. being refused. Of *Californian* honey 40 cases, partly candied and fermented, were offered, and 20 of these sold at 45s. per cwt.

**IPECACUANHA.**—Of 57 serons Rio root 47 sold at prices which at first showed about 1d. decline, but gradually improved, and at the close were slightly in advance of last auction rates: for picked root 8s. 4d. was refused; wiry to good strong stout root brought from 7s. 6d. up to 7s. 10s. per lb.; first-class damages brought 7s. 2d. to 7s. 8d.; second-class from 7s. 4d. to 7s. 6d., and third-class 7s. 2d. per lb. Of Carthagena root three packages, altogether about 150 lbs. were offered; they showed a very fine pale quality, and sold with good competition at an advance of 1s. per lb., realising 7s.

**JALAP.**—Three bales Vera Cruz, mixed sizes, fair quality, sold at 1s. 8d. to 1s. 9d. per lb.

**MERCURIALS.**—The agents for the French maker inform us to-day that they have reduced the price of calomel to 2s. 8½d. per lb. Their other preparations remain unchanged.

**MUSK.**—A large quantity of Tonquin musk was offered to-day, and met with an improved demand. Of 12 caddies first pile 6 sold at 53s. 6d. to 58s. for small to bold old-fashioned pods, well trimmed and dried to ditto, but much less skinny; for fine thin blue skin pods 70s. is asked. Of third pile 45 caddies were shown, of which 17 sold at an advance of about 3s. to 4s.; partly grey, hard skin, indifferently trimmed good bright pods, medium to bold, at 26s. 6d. to 28s. 6d.; ordinary damp untrimmed and skinny at 20s. 6d. to 21s. per oz.

**NUX VOMICA.**—There has been a good demand lately for fine qualities; at auction to-day 100 packages of Coconada, nearly all damaged, sold at 11s. 6d. per cwt. for good pale sound, and from 5s. 6d. to 7s. 6d. for partly black oil; damaged very low quality realising 1s. to 2s. per cwt.; another parcel of small but pale somewhat dark mixed but sound seed sold at 10s. 6d. per cwt.

**OIL (CASTOR)** has declined in value: 52 cases yellow and pale mixed Coconada sold at 2½d. to-day, rusty tins bringing 2½d. For yellow Calcutta oil 2½d. is asked, and 20 cases from Singapore sold at that figure.

**OILS (ESSENTIAL).**—*Star-anise* oil is held at 6s. 3½d. per lb. for "unworked," imported *via* Hamburg. In Tonquin oil sales are being made at the rate of 5s. 9d. to 5s. 10d. per lb., c.i.f. terms. A parcel of Dodge & Olcott's *Clove* oil (which they guarantee to be pure) was offered at to-day's auctions. The price, at which the broker stated that sales were being made every day, is 2s. 6d. per lb.—an offer of 2s. 2d. per lb. was refused. Six 22-oz. bottles Bay oil, "from Kew Gardens"—probably from one of the West India Islands—sold at 7s. per lb.; and for 25 cases *Lemongrass* oil in bottles, 1½d. to 1½d. per oz. was paid.

**ORRIS-ROOT.**—Mogadore root realised higher prices to-day, with good competition: 28 serons fair brownish were all sold at from 32s. 6d. up to 36s. per cwt.

**PATCHOULI.**—A parcel of about 300 lbs., in very small packages, from the West Coast of Africa, newly-imported, broken leaves and very stalky, sold very cheaply at 2½d. per lb.; another parcel of East Indian leaves, rather weak flavour and dusty, are held for 3d. per lb.

**RHUBARB.**—Rather firmly held, and realising steady prices. Of 60 packages, only 11 were sold to-day, most of the limits, especially for the new parcels, being too high. *Shensi*, small to medium fair coat, three-fourths pinky, one-fourth dark, realised 1s. 9d.; not so good ditto round, 1s. 7d.; small to

medium, partly horny coat, half grey and half fair fracture, 1s. 3d. to 1s. 5d. *Canton*, flat horny pickings, 11½d.; and ordinary wormy *Rhapontica*, 3½d. per lb.

**SAFFRON.**—Reports from Spain speak of lower prices. Finest Valencia is now quoted at 31s. per lb., a decline of 1s. to 1s. 6d. per lb. on the week.

**SARSAPARILLA.**—This drug was in very small supply to-day. *Honduras* is quoted at 1s. 6d. per lb. for good brands, and 10 bales damaged *Guayaquil* sold at 1s. 1d. per lb.

**SENNA.**—*Alexandrian* is dull on sale, and in large supply. Importers would probably be disposed to take lower prices, but there is no demand. At auction to-day 79 packages were all bought in at nominal rates. Of *Tinnevely* senna (which is still arriving very slowly), 285 bales were shown to-day, about two-thirds of which sold at firm prices for ordinary, and somewhat higher rates for good grades. Bold bright green leaves realised 8d.; medium to bold, slightly specky, ditto, 4d. to 5½d.; ordinary to medium greenish, 2d. to 3½d.; common, down to ¾d. per lb.

**SOY.**—An offer of 1s. 2½d. per gallon was refused to-day, the lowest price being 1s. 3d. per gallon.

**TONQUIN BEANS.**—A considerable quantity of Pará beans was offered to-day. For one lot of good frosted an offer of 2s. 10d. per lb. was refused; another parcel is held for 3s. per lb.

**VANILLA.**—There was a very large supply of new vanilla, nearly the whole of which was sold: good and fine qualities of over 7 inches in length, with excellent competition, and at rather dearer prices. Short beans were irregular, but averaged about the previous sales' rates. Fine 6½ to 8½ inches brought 13s. to 15s.; 7 to 7½ inches, 9s. to 12s.; chocolate, 4½ to 7 inches, 4s. 6d. to 8s. 6d.; common split and reddish down to 2s. per lb.

**WAX (BEES').**—All varieties are dearer and in strong demand. *Jamaica* sold at 7l. 2s. 6d. to 7l. 7s. 6d. for good even red, and from 6l. to 7l. for ordinary grey to fair brown. For 3 casks red *Italian* wax 6l. 10s. was paid, and yellow *Australian* wax realised the very high price of 7l. 7s. 6d. per cwt. *Madagascar* wax is about 5s. per cwt. dearer. Of 332 packages 278 sold at 5l. 10s. to 5l. 17s. 6d. for fair to good bright, and there was an offer of 6l. 2s. 6d. for the finest pile.

#### DRUGS FROM THE GERMAN COLONIES.

THE *Pharmaceutische Zeitung* publishes the first of what promises to be a series of exceedingly interesting articles on the progress which has already been made in the cultivation of drugs and other Colonial produce in the German colonies, and on the outlook for the further successful propagation of such articles. Much of the information has been supplied by the Ost Afrikanische Gesellschaft, which is the equivalent of our own British East African Company, and the territories of which adjoin the country under British influence on the African East Coast. Particulars have also been given by Dr. Hindorf, who has been acting for some time as the German expert in matters of produce-growing in East Africa, but who has had to resign on account of failing health, and is now in Germany.

#### TRADE INCREASING.

The unfavourable reaction upon the trade of German East Africa caused by the recent disturbances in the interior has been partly allayed; the German trading establishments in Tanga, Pangana, Bagamoyo, Dar-es-Salaam, Kilwa, and Lindi, are again receiving a considerable amount of trade from the interior, and it is expected that at the end of this year the exports from German East Africa will show a very large increase. This of course, it should be understood, is the official view of the German company, and it is permissible to assume that it is to some extent at least exaggerated. Whatever increase may occur in the exports from German East Africa will in the first place benefit British Indian trade, as Bombay remains, as it has long been, the chief outlet for all goods from the East African Coast. In fact, the German company in their last report, just published, lay stress upon this fact themselves, and appear to acknowledge that they can only advance the benefit of



their territories by increasing the facilities of communication with Bombay. The principal plantation in German East Africa is that at Lewa, where the German East African Plantation Company are growing tobacco. Lewa has a good soil and a sufficiency of running water, which secures the necessary amount of moisture all the year round.

#### TOBACCO AND VANILLA.

The first crop of regularly harvested tobacco from this plantation will be placed on the market this year. It will be large enough to give a fair test of the capabilities of this plantation. Another plantation company owns a similar tobacco-plantation at Amboni, situated about one hour from Tanga. Amboni is a much-frequented market place and very favourably situated. An area of 42 acres has already been cleared here and is mostly under crops. The harvest prospects are described as exceedingly satisfactory. Quite close to Tanga, Mr. St. Paul Illaire has commenced a vanilla-plantation. The possibility of the successful cultivation of vanilla in a climate such as East Africa is shown by the excellent results which have been obtained in the Island of Réunion. In German East Africa itself, at the French mission in Bagamoyo, vanilla has already been produced of which two shipments have thus far been sent to Europe. These two shipments, however, have not been sufficient to indicate with certainty the prospects of success of this exceedingly sensitive crop. The beans of the first shipment are described as being of excellent aroma, but too small in size; those of the second, as having been sunburnt and deficient in aroma. It is hoped that better results will be obtained in more sheltered positions. The requirements for a successful propagation of this plant are principally a constant, hot temperature, and the existence of abundant shade.

#### COTTON, AND BOTANIC GARDENS.

There is a cotton-plantation at Kikogwe, opposite Pangani, which is the property of the German East African Company; it had to be abandoned when the late disturbances broke out, but has now been taken up again and considerably enlarged. It is under the management of an experienced Mexican planter, who holds out expectations of a fine first crop in the near future. If this first effort is successful, special attention will be paid to the propagation of various kinds of cotton in the colony, with the view of determining which is most suitable to the soil. It will be necessary to make the cotton-crop in the first place one for cultivation by the natives rather than by European settlers. The French mission in Bagamoyo are also growing this useful plant. The German Government have given a considerable sum of money for the establishment of an experimental garden near the governor's house in Dar-es-Salaam. Governor von Soden is said to take quite an exceptional interest in the growth of economic products. But the principal plantation of all is that of Derema, which was established in August of last year by Dr. Hindorf, and upon which the highest expectations of success are placed. It is situated at an average altitude of 3,200 feet; the soil is rich in humus and possesses the physical qualities of a good loam soil. The plantation has been established on a clearing in the virgin forest, and possesses an abundance of running water, which at the same time provides the power for working all the necessary machinery. There are about 280 natives in constant occupation on this estate. The principal cultures here consist of

#### TEA, COFFEE, AND COCOA.

Tea is to be cultivated on the highest part of the plantation, as the plants are believed to obtain a finer aroma there than in lower soil, and as, moreover, they are the hardiest of any cultivated. The seed for these tea-plants has been obtained from Ceylon, and consists of China as well as Assam varieties. The authorities do not appear to be very sanguine as to the success of tea-cultivation upon their plantations, especially as they work at greater cost than the Ceylon planters. The coffee-seed has been obtained from Sumatra, where the coffee is less subject to attacks of the *Hemileia vastatrix* than in Ceylon. The coffee-plantations are next in altitude to the tea-plantations. The first crop cannot be expected until after four years. Coffee-growing in the present condition of the market could hardly fail to be satisfactory from a financial

point of view, but it is doubtful whether the same favourable conditions will prevail later. The planting of cocoa has given rise to a great deal of trouble, as it was found that the seeds had lost their vitality upon arrival. Experiments have been made to import the cocoa-beans in cases between layers of powdered charcoal slightly pressed, and also to import seedlings in Wardian cases. The latter method has proved the more successful, although it is exceedingly expensive. Cocoa-seed has also been obtained from Ceylon, and much is expected from this cultivation, as the demand for the article is said to be greatly on the increase, and less labour is required for this crop than for coffee. This list exhausts the number of staple products. Among the articles which it is intended to cultivate in the first place only in an experimental way is

#### CINCHONA,

for which a small garden is now being laid out; but, although it is intended to raise a few hundred trees, there is no idea at present of endeavouring to enter into serious competition upon the already overcrowded markets. A rather experimental cultivation is indiarubber. The plants of the *Hevea brasiliensis*, which yields the so-called Pará rubber, as well as of *Manihot Glaziovii*, from which the Ceara rubber is obtained, are now being raised. The rubber hitherto exported from East Africa, which last year shipped about 200 tons, is exclusively produced by the wild *Landolphia* varieties; it realises a good price in the wholesale market, and is superior to the West African rubber by reason of its less pronounced odour. But quite lately there has been a great deal of complaint of the increase of adulteration in this product. By Government order, however, issued last year, the trade in evidently adulterated rubber has been prohibited under heavy penalties.

#### FRUIT, SPICES, AND DRUGS.

Fruit-plantations are also being established, though, if successful, it is not intended to enter into competition upon the European market, but rather to export to Aden for the use of ships passing that port. As soon as time permits, experiments are likely to be made in the cultivation of spices, especially cloves, nutmegs, and pepper (the latter near the coast region), as well as with gambier. The oil-palm does not seem to take kindly to the soil of German East Africa, though, if it should be found that its cultivation is possible there, the erection of suitable modern oil-mills will become a matter of interest. The plant yielding the calumba of commerce (*Jateorrhiza calumba*) occurs only sporadically in German East Africa, and as the demand for it is subject to great fluctuations, and is inconsiderable at the best, its propagation does not hold out any inducements. Tamarind-trees do occur, but hitherto their fruit has not been gathered for export purposes. Areca-nuts have been exported from Tanga and Pangani in small quantities only, and beeswax has, up to the present, been scarcely a commercial article. Among other articles of vegetable origin, copal takes the first place; it is traded in excellent quality, especially in Kilwa and Lindi. Gum arabic occurs in the various kinds, but mostly of very inferior quality, in the Arnsha region of the Kilimanjaro mountain. Two bales have recently been received in Germany from the colony, but they show an altogether insoluble gum, the viscosity of which was such that one part of gum to three parts of water produced a jelly-like mass. On the other hand, a sample received from the Arnsha district showed an almost soluble drug. There is, therefore, some hope that a suitable gum may be obtained as the result of closer investigation. The main difficulty in the way of successful plantation in German East Africa is the one of cheap labour. Hence only the cultivation of high-priced articles holds out hopes of success. The system of forced cultures (which, for instance, still obtains to some extent in the Dutch colonies) has been frequently recommended as suitable for the production of large staple articles; but the trouble is that it is impossible to force the natives by means of fines, as they possess nothing, whereas physical force could hardly be employed. Some time ago an attempt was made to place a tax upon palm-trees, but its only result was that the natives partly cut down their trees, and one and all refused to extend their plantations. Attempts have been made to induce the natives to cultivate sesame-seed to a greater extent than they do now by giving them free supplies of seed, but these have not been very successful.





### Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulae consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

### On the Amorphous Bases of Aconite.

SIR,—For some time past I have been engaged in collecting all reliable information on the alkaloids of the aconites,\* and at the British Pharmaceutical Conference at Cardiff I read a paper entitled "Suggestions for the Assay of Aconite and its Preparations," which was substantially a chapter of the compilation I had undertaken.

In the paper at Cardiff (THE CHEMIST AND DRUGGIST, xxxix., 293) I described a method of assay, based on a suggestion of Dr. Alder Wright, and depending on the fact that aconitine was capable of saponification with formation of 19 per cent. of benzoic acid and the nonsaponifiable base aconine, and that the other poisonous bases, pseudaconitine and japaconitine behaved very similarly.

Mr. J. C. Umney took part in the discussion which ensued, and I find, by conversation with a number of those who were present, or have read reports of the meeting, that Mr. Umney conveyed to them the impression that a process of assay based on the saponification of the active base of *Aconitum Napellus* was "perfectly incorrect," owing to the co-occurrence of an amorphous, and substantially inactive, base, yielding about 22 per cent. of benzoic acid on saponification, and present in such amount as possibly to double the apparent proportion of aconitine present. Mr. Umney said this base was first observed by Alder Wright, was referred to by Dunstan and Ince, its presence confirmed by J. Williams, and its characters more fully investigated by Jürgens, whose observations Mr. Umney had "had the opportunity of confirming exactly." He made his statements, not on the strength of his own unpublished experiments, but on the authority of Jürgens and other observers.

Since the meeting at Cardiff I have carefully examined the extent to which Mr. J. C. Umney's statements were correct. I have communicated with him both verbally and by letter, and have pointed out in detail the respects in which his statements appear to have been inaccurate or open to misinterpretation. As Mr. Umney does not see his way to accept my suggestion that he should himself correct these points, I feel bound, in justice to myself, to put right several of his statements, which have misled, or are apt to mislead, others.

1. Mr. Umney stated that the amorphous, inactive saponifiable base in question was referred to by Messrs. Dunstan and Ince in their paper "On the Crystalline Alkaloid of *Aconitum Napellus*" (Jour. Chem. Soc. lix. 271; Pharm. Jour. [3] xxii. 55, 74); the fact being that in their penultimate paragraph these authors state that in order to throw light on the alkaloids other than aconitine contained in *A. Napellus*, "if other alkaloids there be," an investigation is being made of roots from specially-selected plants.

2. Mr. Umney stated that the amorphous, inactive saponifiable base in question had been found by the late Mr. John Williams—the fact being that Mr. Williams simply mentioned a gummy impurity associated with aconitine, and never stated or suggested that it was either saponifiable or inactive. It must be *both* to affect the question at issue.

† † †

\* For the new edition of my "Commercial Organic Analysis," now going through the press.

Mr. Umney has simply *assumed* for the gummy impurity observed by Mr. Williams the properties of inactivity and saponifiability, and has ignored the presence of other amorphous bodies not having these characters.

3. Mr. Umney stated—or, at any rate, his reported observations led to the inference—that Jürgens had recently fully investigated the subject, and described his results in a paper never published in English; that he found the base in aconite in the proportion of 0.02 to 0.03, out of 0.07 per cent. of total alkaloids; that he had analysed the base in question and determined its combining weight; proved it to be inactive and to yield about 22 per cent. of benzoic acid on saponification, and that these results had been fully confirmed by Mr. Umney's own experiments. Jürgens's paper was one of the "Inaugural Dissertations" delivered at Dorpat, in Russia, in 1885, and I have consulted the volume in the library of the Pharmaceutical Society, which is probably the only copy in England. But the paper hardly bears out what I and other hearers of Mr. Umney understood him to say. What Jürgens *actually* did was to isolate a small quantity of an amorphous saponifiable base from the root of *A. Napellus* and submit it to a partial investigation, the *very small quantity of material at his disposal* preventing any complete examination being made. This, too, is the chemist who had access to unlimited supplies of aconite-root, and who had just isolated crystallised aconitine in considerable quantity and examined the characters of the alkaloid and its salts in the fullest possible manner! Jürgens could not obtain the amorphous base wholly free from aconitine, and he found it to contain C 67.74 and H 8.40 per cent. On saponification it yielded a base allied to aconine and an *unstated proportion of benzoic acid*. Such salts as were examined were amorphous. *This is all*. No "22 per cent. of benzoic acid," no statement of the amount present in the root, and no reference to the inactive character of the base, though the taste is described as bitter and not tingling.

4. The figures given by Mr. Umney (0.07 of total alkaloids and 0.02 or 0.03 per cent. of the base in question) are not those of Jürgens at all, but results obtained by Alder Wright and Luff. But Mr. Umney makes the unwarrantable assumption that all that was not crystallisable aconitine was the inactive, saponifiable base in question! Either he confuses this base with aconine and the other nonsaponifiable bases of aconite found by Wright, or he deliberately ignores them. Wright and Luff obtained from the mother-liquors, from which as much crystalline aconitine as possible had been separated, an amorphous base containing C 66.39, H 7.74, per cent. (not far from the proportions of Jürgens), which yield about 14 (not 22) per cent. of benzoic acid on saponification. I have communicated with Dr. Alder Wright, and he states that it is impossible to form any idea of the proportion of the amorphous saponifiable base present. He does not regard his product as having been a single alkaloid, but believes it still retained aconitine, which was prevented from crystallising by the amorphous bases present, just as cane-sugar is retained in molasses.

Mr. Umney seems to have built up his evidence from an impure base described by Wright and Luff as existing in perfectly unknown quantity; a similar base obtained in small amount by Jürgens; a wholly imaginary reference to such a base by Dunstan and Ince, and convenient hypothetical characters assumed for the gummy matter of Williams. These materials, with some misinterpretation of figures, are the data which have sufficed Mr. Umney to assert the presence in *Aconitum Napellus* of an inactive and saponifiable base of such composition and in such proportion as materially to affect the saponification method of assay, and not improbably double the yield of benzoic acid obtained on saponification. It may be true, but there is no foundation for the assertion that any investigations hitherto published prove anything of the kind.

I am, Sir, yours, &c.,  
Sheffield, November 16.

ALFRED H. ALLEN.

### Moderation in Cutting.

SIR,—In every well-regulated establishment there is an annual review, or stocktaking. The governor usually thereafter makes some alteration or deviation from the ordinary conduct of his business; profiting by the state of affairs revealed to him. As chemists it is desirable that we do the



same, and the present appears to be a most suitable time for making an alteration in the conduct of our trade.

In a time of panic, some few years ago, it was thought desirable, if not absolutely necessary, to make an alteration. This, unfortunately, was in the direction of reducing the price of all patent medicines and of many drugs. At that time, as everyone knows, there was great stagnation in trade and manufactures throughout the country. Cheap stores, moreover, rose, progressed, and eventually flourished, so that there was undoubtedly some justification for entering upon the down grade. But that stagnation of trade has now happily passed away, and, in its stead, a healthy and most satisfactory business tone obtains. Stores have, in a measure, ceased from troubling, and no longer obtrude the supply of cut patent medicines as their sole *raison d'être*. Is it not desirable, therefore, that an effort now be made to recover, at least in part, what was then lost? Is it not in the last degree ridiculous that a man, claiming to be both intelligent and educated, should continue, year by year, trade good or bad, to retail goods at unremunerative prices? More than likely his clients despise him for his weakness and folly in doing so. Well do they know that, in many cases, the profit he earns does not recoup him for the outlay on paper and wax employed in wrapping up the wretched nostrums. This is not by any means as it ought to be. If there is no prominent individual amongst us who might lead the way in at once putting a stop to such arrant folly, surely each one for himself might attempt gradually to do so. It is only necessary that one should charge, say, at least one shilling for the usual threepence-halfpenny article and adhere, in so far as is consistent with business tact, to that price in future. I have for some time now attempted this experiment, and find it works well. My experience, indeed, is all rosy-hued. In only one instance did disaster threaten; but even in this instance subsequent events have proved that, instead of disaster, victory all along the line has accrued.

My customer, deaf to all reason and argument, sailed majestically, but most indignantly, out of my presence. She is nevertheless a good customer still, and—who knows?—may even hold her chemist in higher respect than before the war of prices was waged.

A fair profit on patents, a fair profit on drugs, and a good profit on prescriptions is our legitimate demand. As far as my own experience goes, there are few indeed among the public who grudge all that.

Abbey Park,  
Dunfermline.

JOHN H. FISHER,  
Pharmaceutical Chemist.

#### The Purity of Chloroform.

SIR,—If Pictet's chloroform-purification process does not prove a commercial success, it will not be for want of abundant notice in the scientific journals. That a good deal of nonsense has been written about the same process seems evident enough, and I think your criticisms are very much to the purpose, although I would not commit myself to concur with every word you say on the subject. From the very first, the Pictet chloroform reports have abounded in audacious assumption and calm assertion. The fact that a particular chloroform has been crystallised is not in itself a proof of purity. One might as well say that a salt which has been crystallised must be pure. The fact of chloroform crystallising at a low temperature does not tell in its favour, but quite the contrary, because combinations after the manner of cryohydrates are much more likely to occur at lower than at higher temperatures. We know, further, that chloroform combines with water, with some alkaloids, and no doubt with many other substances, so that it is quite probable that at low temperatures the chloroform may combine with one or other impurity in the impure chloroform. As a matter of reasoning, I should say that chloroform prepared by the action of dilute soda solution on purified chloral hydrate is quite as likely to be chemically pure as chloroform prepared by freezing from impure chloroform. Yet we do not find chloroform prepared from chloral hydrate to possess any advantages over chloroform prepared and purified in the ordinary way. It is interesting to have the admission that Pictet chloroform *does* sometimes decompose. This brings us back to our old familiar friend, ordinary chloroform. The statistics as to relative number of deaths

under chloroform in England and in Germany may safely be set down as "bosh." I believe it was Mr. Spurgeon, who described statistics as "another method of lying," and surely, as they are sometimes collected, the expression is justifiable. Everyone will admit that chloroform for anæsthetic purposes should be practically pure, but there is not a particle of evidence that chloroform prepared by the action of bleaching-powder on alcohol, and properly purified, ever contains anything which is deleterious or dangerous. It seems strange that when the rare event happens of a death during the administration of chloroform, there is a tendency to immediately blame the anæsthetic. I remember disussing the subject of impurities in chloroform with a distinguished professor, and the following, if not his *ipsissima verba*, is almost exactly as he remarked:—"The danger does not arise from impurities in the chloroform, but from the state of insensibility into which the patient has been brought. There is a danger in going to London by the express train, but most of us find it, upon the whole, the most convenient way of getting to London. Similarly, there is danger in administering an anæsthetic; but we are agreed that, when an operation is to be performed, it is, upon the whole, the best plan to administer chloroform." Much more might be said on this subject, but I think I have encroached sufficiently.

I am, Sir, yours very truly,

Musselburgh, N.B.,  
November 20.

D. B. DOTT.

#### Chloroform and Gaslight.

SIR,—Your remarks on Mr. Lichtenstein's paper on "The Decomposition of Chloroform in Gaslight" recalls to my mind a conversation I had with one of our local medical men on this subject some months ago. He informed me that one evening when performing some minor operation under chloroform he, along with one or two others in the room, was seized with a violent fit of coughing. The patient, too, seemed to resist the inhalation of the vapour, and this led to the conclusion that the chloroform was impure. On trying the same chloroform in the day-time no such effect was produced, and this led to the theory that the chloroform-vapour was being decomposed by the gas-jet. Mr. Lichtenstein's paper seems to corroborate this theory, and therefore your remark that "no one appears to have conceived that such a result would occur in the case of coal-gas" is not quite correct.

I am, yours truly,

Dumfries, Nov. 21.

ALEXANDER TURNER.

#### The Sale of Poisons.

SIR,—I was very pleased to read your leader in the issue of November 21, and quite agree that if the "poor, wretched Poisons Act" of 1868 had been used properly we should have a different state of things to-day.

Recently I have been doing business with photographers and jewellers, and have frequently been asked, "Why is it that I can go to Clerkenwell and buy as much cyanide of potassium and bichloride of mercury as I want without a single question being asked, and you make me sign my name?" &c., &c.

Also I find that these dangerous substances are often sent out without even being labelled "Poison."

Yours, &c.,

London, S.W., Nov. 25.

PHARMACIST. (171/63.)

#### Stocktaking.

SIR,—In reply to inquirers as to stocktaking, allow me to give them my method. As far as possible, we have all receptacles tared; this saves the time and waste otherwise spent in emptying goods out to be weighed. We begin with bottles, boxes, empties, and packed goods stowed in the back premises, then the heavy goods, lastly the shop. All bought goods are put down at current rates, patents at net prices. All goods of our putting-up are not tabulated, but lumped together; for example, 1*lb.* packets of dyes, drugs, and sundries are counted all together, and put down as so many dozen of 1*lb.* articles at 6*s.* gross, and so on. Sixpenny goods are mostly at 3*s.* 6*d.* per dozen. Our own proprietaries are put as near cost as possible; thus, say there are 2 dozen 1*s.* hair-restorer—suppose they cost 4½*d.*



each, I add about 15 per cent. to this, to include time, labour, labels, &c., making them 5s. per dozen in stock sheets. Any goods unsaleable—that is, not selling since previous stocktaking—are not marked down but put aside, and either worked up into something else or given away. When the sheets are totalled up we deduct 5 per cent. from the gross amount (patents excepted). As regards fixtures, &c., I put down the amount I paid for them, plus the amount paid out during the current year for any extra fixtures, fittings, utensils, tools, &c., then deduct 10 per cent. for depreciation: this is in reference to the first year. At the next stocktaking I put down this net amount without any more deduction. Glass measures and similar fragile articles I take no account of. If this is not explicit enough, I shall be glad to answer any apparent difficulty that may arise.

Yours,

KORUGA. (164/62.)

#### A Veterinary Treatise for Sale to Customers.

A northern correspondent writes: "A popular edition of Veterinary Practice, *not counter*, on the same lines as the present would take well among rural populations. Our book is hardly ever in the shop—first one coachman and then another having borrowed it. Something to retail at 2s. or 2s. 6d. would be saleable by chemists."

[We could easily adapt "V. C. P." for the purpose indicated, but should like to know whether many chemists would be inclined to sell it. Some, we think, would regard it as giving away formulae which should be kept secret. We do not ourselves think the course suggested would be unwise, and think it would bring business. But we should like to be advised.]

#### Assistants' Grievances.

SIR,—I read in your excellent journal the note headed "Assistants' Grievances." One would hardly credit it possible for masters to show such narrow-mindedness towards their men, and it is strange that no one, to my knowledge, has ever had the courage to act as *dux* of a society to improve the position of the assistants socially. Men who find comfort generally like to retain it, and in the main it is the employer who gains, for nothing adds so much to success in these days of strife as the same faces to supply the wants of the *clientèle*.

Yours truly,

NIX. (169/68.)

#### DISPENSING NOTES.

*The opinions of practical readers are invited on subjects discussed under this heading.*

#### Conscientious Dispensing

SIR,—I am glad to see, this week, a little warmer interest taken regarding my letter, which appeared October 24, respecting the addition of mucilage to mixtures when not ordered in the prescription. But I would recommend my brothers in the trade not to get angry over the discussion. There are four letters this week: to save time and space, I will answer them as though they were one.

I was pleased to hear again from "Ignoramus." "Student" made a very creditable attempt. I will show him, "Ignoramus," and all who wish to know, how to make the guaiacum mixture better without mucilage and without the use of "mortar," "muslin," or "cone of paper." But let me remark, first, I never used the word "conscientious," and do not pretend to pose as its apostle. I have not refused to tell "Ignoramus": I simply wished to create discussion. I have not recommended hydrochloric acid in place of mucilage; it is too absurd. Remarks showing pique would be better omitted. I would suggest that my letter, November 14, be read again.

I will now explain how I make the guaiacum mixture. Measure out the whole quantity required of distilled water in a measure larger than is necessary to hold it; place it on the counter; then take the guaiacum tincture in another measure, and pour it in the centre of the water in the mea-

sure on the counter. Stir immediately afterwards. The guaiacum must not touch the sides of the glass before mixing with the water. The salts may be previously dissolved in the water, or put first into the bottle.

With regard to the arsenical mixture, my opinion is, it should not be made up at all as a mixture, but if it must be done, it can be dispensed as written; and I again say that acacia mucilage would be the worst thing that could be added to it. The mixture I made did not "cake," nor did "bits" form, and I do not understand how such should happen in Mr. Roberts's hands. I send, Mr. Editor, a bottle of it, made as I suggested at the time—November 7—and one of the guaiacum mixture, made October 30. I leave you to judge. My only object was to benefit the trade by calling attention to the indiscriminate use of mucilage, &c., when not ordered by the physician.

Yours truly,

68 Fleet Street, E.C.,  
November 21.

GEO. P. POND.

[Mr. Pond's mixture, made with tr. guaiaci ammon., B.P., is good. Both of his arseniate-of-iron mixtures also are. The one with hydrochloric acid is a perfect solution.—ED.]

#### The First in the Field.

SIR,—Every item, however small its actual merit, which tends to ensure uniformity in dispensing, I think you are generally willing to have attention drawn to. Last week I dispensed an alkaline and acid mixture. The latter contained 3ij. succus limonis, and, I observed, had been dispensed by a West-end chemist. I concluded the recently expressed juice would be used, and I used it. At once a call followed with a sample of the London mixture. It was of a pink colour, similar to many samples of artificial succus limonis supplied by wholesale houses. My mixture was perfectly white, being the above with salicin and tragacanth mucilage, with nothing to produce colour. I need scarcely say the man who had his hand first in was believed in more than was one who would prefer to have a

UNIFORM STANDARD. (171/38.)

#### Lin. Terebinth. Co.

SIR,—I should be glad to know through your next issue what should be dispensed when "Linim. Terebinth. Co." is ordered in a prescription.

CYMRO. (170/72.)

[The choice is between lin. terebinth. and lin. terebinth. acet. We cannot trace any connection of "co." with either, but they are equally of a compound nature. We should give the former. What do correspondents say? Post-card replies, please.—ED.]

#### A Citrinated Glycerine.

SIR,—Kindly ask in your "Dispensing Notes" if a decent ointment, which will not separate, can be made from the following prescription:—

Ung. citrini	..	..	..	..	5ij.
Glycerini boracis	..	..	..	..	3iv.
Glycerini purif.	..	..	..	..	3iv.

Ft. ung.

EAST ANGLICAN. (170/38.)

#### LEGAL QUERIES.

168/41. *One in Doubt.*—You may consign any patent medicines to agents abroad (and abroad on this occasion includes Ireland and the Channel Islands, and everywhere outside Great Britain); but if you *sell* them here for export you must stamp them. You will find the official information announcing this on page 162 of the new CHEMISTS' AND DRUGGISTS' DIARY, which you will get in a few days.

100/6. *W. G. S.* received a hamper by carrier, in whose presence it was unpacked, revealing a smashed Winchester of spirit. aether. nit. Who is liable? Carrier says the hamper was brought to him by the porter of the wholesale house, and he did not sign for it. Clearly the responsibility lies



between the wholesale house and the carrier, and a court would hear evidence as to packing, &c., before deciding. But there ought to be no occasion to go to law. The wholesale house and the carrier ought to come to some terms between them.

100/21. *Eucalyptus*.—The only medicines you may, without special permission, make, keep, or sell with methylated spirit as an ingredient are liniments of aconite, belladonna, soap, and compound camphor. Although the Inland Revenue permit the sale of these methylated liniments, it would be an infringement of the Pharmacy Act to dispense one of them in compounding a physician's prescription.

167/63 (Yanson) and 170/31 (J. H.).—"Vaseline" being the registered trade-mark of the Cbeesebrough Company, anyone who uses it for an article not made by them is liable to an action for infringement.

167/29. *Vin Aromatique*.—You would certainly require a wine-licence to sell the compound you suggest. This liability would not be affected by the label. If you omitted the sherry, a sweets-licence (25s.) would do; but with the sherry you must have the off wine-licence (2l. 10s.). For full particulars of licences, see the DIARY.

170/32. B. H. B.—The words "Prepared expressly for children from 2 to 14 years of age" would not, by themselves, render a medicine liable to stamp-duty.

170/37. *Caution*.—The widow of a deceased chemist and druggist who is also his executrix may carry on her late husband's business (with the help of a qualified manager) to the fullest extent. She may sell all poisons and the labels may bear her name, or she may continue to use that of her late husband. It would not be correct to use the manager's name. There is no register for widows or executors. Their rights are established by Act of Parliament.

170/45. A. C. G.—Write again to the company and threaten County Court proceedings, and if you are sure you can prove your case, carry out your threat if you don't get your money.

169/6. *Ignis* says his fire-insurance policy contains the following paragraph: "Warranted that no petroleum, paraffin, or other mineral oils, or liquid product thereof, for illuminating or lubricating purposes, be deposited or kept for sale on said premises." He adds, "As I have a small stock of the new methylated spirit I should be glad if you would tell me if this would be thought to apply to the spirit, as I believe it contains mineral naphtha." Clearly the clause does not apply to such spirit, as this is not for illuminating or lubricating purposes, but "A. C. G." might possibly save trouble if he were to get a letter from the insurance company admitting this.

170/49. *Oxygen* asks if he is infringing the Explosives Act or endangering his fire-insurance policy by keeping oxygen in cylinders for sale. He sells it for magic-lantern displays. [Explosives within the meaning of the Act comprise every substance "used or manufactured with a view to produce a practical effect by explosion or a pyrotechnic effect." This description might certainly include the oxygen, though we do not think the authorities have understood it to apply to such a substance. Will "Oxygen" kindly write to Colonel Majendie, Inspector of Explosives, Home Office, Whitehall, putting the question and advising us of the answer? The fire-insurance policy should show whether such an article may be kept, but if it is at all doubtful our correspondent had better get a definite reply from the company and attach it to his policy.]

171/16 H S.—You are not entitled to any payment beyond the month's salary.

171/28. *Anxious*.—You are liable to an Excise prosecution and a heavy penalty if you sell toothache-tincture made with methylated spirit.

171/22. *Ol. Morrhuæ*.—An Irish druggist registered after examination under section 8 is not entitled to describe himself as a chemist and druggist. He can only assume the title of registered druggist.

171/47. G. B.—Your label expressly recommends your preparation "in cases of consumption, chest-complaints, and wasting diseases." That appears to us to render the compound liable to stamp-duty.

171/34 *Veritas*.—You will find instructions for the registration of a trade-mark in DIARY 1891, page 158. If there is no opposition the cost of application and registration will be 25s. If you get the name registered as a trade mark you have a *primâ-facie* exclusive right to that title. Your right might be challenged, but the burden of proof would be on the challenger.

171/38. *Eau*.—The law does not permit you to use a still of any size unless you take a licence. But the Board of Inland Revenue may permit the use of a still for chemical experiments, and for this permission application should be made to the nearest Excise officer.

#### MISCELLANEOUS INQUIRIES.

*A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.*

161/23. *Progress* wishes to know what it will cost to introduce the Electric Light into his pharmacy.—Taking two 16-candle power "incandescent" electric lamps as equal to a "Duplex burner" oil-lamp, we estimate the cost of an installation of twenty-five lamps, using an "Otto" gas-engine to drive the dynamo machine, at 270l., inclusive. If gas be not available, a petroleum-oil engine might be employed at a slightly increased cost. A "Thirlmere" water-motor might be used, driven by water from the town mains, if arrangements could be made with the local authorities for the supply of a sufficient head of water, and this source of power would probably be most economical of all. The water-motor is said to work very satisfactorily. The cost of lighting by a private installation of this character would be considerably higher than would be that of lighting by gas at 4s. 6d. per 1,000 feet—probably more than double—but there would be advantages on the score of health and safety from fire if the work were thoroughly well done, which might go far to counterbalance the extra outlay. The light would come far cheaper if a few neighbours could be induced to join, as an installation of 120 lamps would not cost more than 700l. Such firms as Woodhouse & Rawson (Limited), Cannon Street, E.C.; Edison & Swan Company (Limited), 100 Victoria Street, S.W.; or the Electric Construction Corporation (Limited), Walbrook, E.C., may be communicated with.

#### 163/17. *Carbolate*.—Dr. Coghill's Inhalation:—

Eucalyptol..	..	..	..	..	3j.
Chloroform ..	..	..	..	..	3ij.
Ethereal tincture of Iodine (25 grs. to 3j.)	..	..	..	..	3ij.
Carbolic acid ..	..	..	..	..	3ij.
Cresote ..	..	..	..	..	3ij.

Mix.

162/52 W. H. G.—Syr. Pieis, U.S.P.—See this journal January 31, 1891, page 186.



162/62. *Quercus*.—See the formulae for inks in the 1890 DIARY. A good copying-ink from galls must be strong in the gallic element, and should contain three times the usual quantity of gum arabic, as well as 3 per cent. of sugar. See also the article on copying-inks in THE CHEMIST AND DRUGGIST, May 23, 1891, page 716.

162/56. *E. B. M.*—Aperient Saline.—Bicarbonate of soda, 8 oz.; tartaric acid, 7½ oz.; chlorate of potassium, 1 drachm; sugar, 8 oz. Have the ingredients separately dried, mix the chlorate with the bicarbonate, then mix the whole by sifting. Some add a little Rochelle salt—say 2 oz.—but it is better without it.

163/13. *Lupuli*.—Hop Bitters.—In back volumes you will find a number of formulae, or you may try this one:—

Tincture of hops .. .. .	3lss.
.. podophyllin (ammoniated) ..	3ss.
.. buchu .. .. .	3vj.
.. senega .. .. .	3iv.
.. chiretta .. .. .	3ij.
Water to .. .. .	3xx.

Mix the tinctures, and pour into the water. The colour may be brought up with liquid extract of taraxacum.

162/59. *Hard Worker* asks our opinion as to whether he (a youth of 20) should leave the drug trade and study for the Civil Service. He says, "It means hard study in both; but what is the difference, and what are the subjects required for the Civil Service examinations?" [It would be unwise to give general advice in a matter of this kind to a person whose prospects and abilities we do not precisely know. There are various branches of the Civil Service. From the lowest "Hard Worker" is by his age already excluded. He might aspire to the Foreign Office, to the Exchequer Department, Somerset House Laboratory, or to be a Curator of the British Museum. Probably his aspirations may not soar so high; in any case the aspirations will to some extent be satisfied by a perusal of the "Civil Service Year-book" (Sheppard & St. John, 2s.), which gives all the regulations, copies of the examination-papers, and particulars as to salaries.]

165/4. *Avis*.—We have not examined the articles, and have no precise information regarding them further than is given on page 670 of THE CHEMIST AND DRUGGIST, May 9, 1891.

165/3. *Quercus*. Read the Educational Number, September 19.

164/59. *A. C. & Co.* (Oporto).—Garrod's Compound Sulphur Lozenges.—Each one contains 5 grains (0.3 gram.) of precipitated sulphur, and 1 grain (0.06 gram.) of cream of tartar. The basis is the usual sugar-and-gum paste, as for troch. potas. chlorat. B.P., for example.

164/61. *Lemonade*.—We think our own formula for Essence of Lemon (151/32, October 31) produces a superior article to sample 1. The latter contains a little orange (say ½ oz. Tangerine-orange peel, 2 oz. orange-flower water, and 20 grains Tonka bean to each pint). You may add these to the essence you have already made. No. 1 contains less spirit than No. 2.

157/70. *H. G. K.*—Vaseline is largely used in veterinary practice. It may take the place of lard in the hoof-ointment mentioned in "Veterinary Counter Practice."

162/9. *W. R. R.*—Tuson's "Veterinary Pharmacopoeia" (Chnrchill).

168/65. *M.*—A solution of borax is used for treating the wicks of snuffless candles.

167/57. *Succi*. When you added the rectified spirit to the Juices of Celandine, &c., the matter precipitated was chiefly chlorophyll. We do not suppose that it would carry with it much of the active principles. Compare the cases of suc. hyoscyami, B.P., &c. You will get very good results and a perfectly green solution in the following way:—

The fresh juice .. .. .	1 pint
Chloroform .. .. .	20 minims
Salicylic acid .. .. .	30 grains

Mix, and set aside for a few days to settle, then pour off the clear juice and add

Glycerine .. .. .	5 oz.
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Put up in bottles recently washed with salicylic-acid water, and close carefully.

So prepared we think you will find the juices answer the purpose satisfactorily.

167/62. *H. B.*—Herbal Asthma Cure.—Vol. xxxvii., p. 798 (December 6, 1890), contains the formula approved by Sir Morell Mackenzie. As a change upon that you may find the following advantageous:—

Stramonium .. .. .	2 oz.
Black tea .. .. .	1 "
Lobelia .. .. .	1 "
Eucalyptus-leaves .. .. .	1 "
Nitrate of potash .. .. .	1 "
Oil of eucalyptus .. .. .	20 minims
Oil of cubebs .. .. .	20 "

Coarsely powder the herbs, and mix intimately with the nitre and oils.

167/24. *Lymph*.—See page 325 of the 1892 DIARY for books on the eye. We shall keep the query in regard to the manufacture of lenses before us.

164/35. *J. T.*—Thanks for your suggestion. There is a 1s. 6d. book on glass-blowing (see 1892 DIARY, p. 320) which is just the thing you want. Perhaps you have not seen it?

170/20. *Embrocation*.—The B.P.C. formula for lin. opii ammoniat. is understood to be an imitation of Bow's Liniment. It is:—

	℥z.
Liniment of soap .. .. .	6
Tincture of opium .. .. .	6
Belladonna liniment .. .. .	1
Strong solution of ammonia .. .. .	1

Mix, and after standing for a week, filter.

170/64. *T. T. Johnson*.—Yes; equal parts of the solutions are used, at the moment of writing. The mixed ink keeps good for an evening or so.

167/17. *J. G.*—We think you would hear about "minion," or mine iron, for making cycle-tracks, from Messrs. J. Saunders & Co., 86 Darlington Street, Wolverhampton.

169/4. *W. P. K.*—Pink Cobalt Carboy Solution.—Oxide of cobalt is soluble in cold mineral acids, and, on heating, if cobaltic oxide,  $\text{Co}_2\text{O}_3$ , has been used, the oxide is reduced to the dyad state. But it is unnecessary for you to use the oxide; the nitrate and chloride are obtainable, and both are soluble in water. Dissolve an ounce or more of the salt in 10 oz. of water, add strong solution of ammonia until the precipitate formed is redissolved, then make up to a gallon with distilled water. The solution has a beautiful pink colour.

168/71. *R. K.*—There is nothing in the nature of a cosmetic or enamel which would hide the scar. We should be glad to assist you, but the matter is one in which only false hope could be held out. A judicious use of face-powder is the only thing we can recommend; but we understand that surgeons can now remove such scars.



102/36. *C. D. C.* wants "to read a good article proving the existence of **Microbes in Coughs**, and also the efficacy of carbolic acid in the treatment of the same," and invites us to tell him where he can find such an article. This is a large order, and not easily filled either in a brief reply. Our correspondent should, to begin with, clearly understand what he wants to get at. We take it to be the microbic nature of phthisis. That is one disease in which there are cough and microbes together. Dr. Dobell's "Bacillary Consumption" is a very readable and useful hook on the subject. There was an article by Dr. Grün in the *Lancet* a few months ago (See *C. & D.* August 29, p. 349) in which the bacterial nature of bronchitis is referred to. Our correspondent would also do well to read up what is given in the past few volumes of **THE CHEMIST AND DRUGGIST** regarding Koch's work.

167/67. *C. F. S.*—**Nigger Black** :—

Drop black (made from camphor)	..	2 drachms
Almond oil .. .. .	..	2 "
Cocoanut oil .. .. .	..	6 "
Oil of peppermint .. .. .	..	3 drops
Ess. bouquet, a sufficiency.		

98/34. *Ajax*.—**Egg Julep**.—The following is the recognised formula :—

Transparent or fine curd soap	..	1 oz.
Saffron .. .. .	..	30 grains
Water, a sufficiency.		

Shave the soap fine and boil it and the saffron in a quart of water. When the soap is dissolved, strain, and add, when cold, the following solution :—

Oil of lavender .. .. .	..	40 minims
Oil of cloves .. .. .	..	10 "
Otto of rose .. .. .	..	15 "
Oil of bergamot .. .. .	..	15 "
Essence of musk .. .. .	..	1 drachm
Rectified spirit .. .. .	..	1 pint

Make up the julep to 1 gallon with water.

156/12. *American Subscriber* (N.Y.), who wants a formula for a waterproof drawing-ink is reminded of the rules under which our correspondence is conducted, and which he does not conform to.

156/9. *Negro Comedian*.—Formulae for **Face Paints** (theatrical) will be found in **THE CHEMIST AND DRUGGIST**, March 28, 1891, page 461. See also 167/67.

157/27. *Boots*.—Add to the paste blacking another half-pound of ivory black, and half a drachm of powdered dragacanth.

156/38. *A. H. B.* furnishes us with his label for digestive tonic, the essential part of which is :—"Digestive Tonic. For indigestion, headache, constipation, flatulency, and general debility. Dose: A dessertspoonful to be taken after breakfast and dinner in a little water. For children—half the above quantity." The only thing needed now is a recipe for the tonic. In giving the following we suggest that "For children—half the above quantity" should be omitted. It is only in rare cases that children require peptic stimulants. Generally a smart purge relieves them of any digestive trouble :—

Papain (Finkler) .. .. .	..	3ij.
Dilute nitro-muriatic acid .. .. .	..	3iss.
Solution of strychnine .. .. .	..	1ss.
Tincture of gentian .. .. .	..	3lj.
Chloroform water to .. .. .	..	3xxiv.

Mix, colour (if desired) with caramel, and, after standing for several days, filter.

149/21. *N.*—*Abrus precatorius* seeds were used in infusion for producing purulent ophthalmia. We are not aware of Job's tears being used as a medicine. The plants are grown or cultivated in most tropical countries.

156/29. *H. W. C.*—We understand that the varnish used for clay pipes is simply a resin and sandarac varnish.

157/40. *S. E. R.* (Torquay).—You will find a description of the novel way for perfuming hall-rooms in our issue for July 25, 1891, page 143. As regards coloured lights "seen on the stage," you may read the note by Mr. Ellwood in a recent issue; but we think you refer to the limelight, different colours of which are produced by passing the light through coloured-glass plates.

157/56. *Hair-dye*.—For Chestnut-brown Hair dye try the following (a Berlin form) :—

Pyrogallie acid .. .. .	..	1 drachm
Chloride of copper .. .. .	..	2 "
Nitric acid .. .. .	..	5 drops
Distilled water .. .. .	..	6 oz.

Dissolve.

96/10. *Combs*.—You should not attempt to straighten and repolish the **Shop-worn Combs**. Heat and a special press are required for the former, and for the latter a wheel made up of forty or fifty circular pieces of calico. The great speed at which this wheel revolves does the polishing. Obviously, you cannot do either, but you can sell the combs at a reduced rate.

159/71. *Ensor*.—We give a list in the forthcoming **DIARY**, from which you will be able to select what you want.

158/52. *Experientia Docet*.—Instead of plain water use chloroform water for the Crown Tonic (vol. xxxv., page 100). The cusparia decoction is doubtless the cause of the moulding.

158/37. *C. Price*.—Use the same series of hooks as are recommended in the Educational number for the Bell scholarship.

159/22. *Dye*.—See reply to "Hair-Cye."

160/38. *H. J. J.*—Mr. McGrath's method for making sol. essence of ginger will be found in **THE CHEMIST AND DRUGGIST** of February 15, 1890.

157/17. *Syphilis*.—"Gant on Diseases of the Bladder, &c." (Baillière, 12s. 6d.); McLaren's "Atlas of Venereal Diseases" (Pentland, 63s.); Milton's "Pathology and Treatment of Gonorrhœa" (Renshaw, 16s.)

170/42. *Cannon*.—(1) **Liquor Sennæ Dulc.**—The trick in making this is to get rid of the bitter principle, and that is done by treating the leaf with spirit. Take 20 oz. of the leaves, and percolate with a pint of rectified spirit (after macerating a day or two). Then exhaust the leaves with boiling water, evaporate to 12 oz., in which dissolve a drachm of nitre and 6 oz. of sugar, and add 3 oz. of rectified spirit containing 20 drops of oil of coriander. (2) We take it that your **Liq. Ferri Iodid.** has become brown through oxidation. Add to each ounce a drop of hypophosphoric acid and  $\frac{1}{4}$  grain of hyposulphite of soda. Expose to the light. (3) **Furnituro-cream** :—

Castile soap .. .. .	..	1 oz.
Yellow wax .. .. .	..	1 lb.
White wax .. .. .	..	1 oz.
Turpentine .. .. .	..	2 pints
Boiling water .. .. .	..	2 "

Melt the waxes on a water-bath, and add the turpentine, stirring until the mixture is quite liquid. Separately dissolve the soap in the water, and pour the two mixtures simultaneously into a hot earthenware jug or jar. Stir for five minutes, and bottle.



157/4. *Data*.—Benedikt's "Coal-tar Colours" (Bell, 5s.). Parazone we do not know. Pyrosin is an eosin colour.

170/48. *Nemo*.—You will find all the particulars regarding the dental curriculum in our Educational Number, September 19.

164/16. *Verax*.—As near as we can make it your Cough Mixture is represented by the following formula:—

Tr. camph. comp. . . . .	3j.
Spt. ether. nitrosi . . . . .	3ss.
Syrup. pruni Virginian. . . . .	3ss.
Syrup. tolutani . . . . .	5vj.
Oxymel. scillae ad . . . . .	3iv.

M.

Dose: For adults a teaspoonful, and for children about 12 years half a teaspoonful, three times a day.

This makes a pleasant and very soothing mixture, free from depressing influence and only feebly narcotic.

171/19. *A Correspondent* asks how he can Solder a Tooth to a metal case without cracking it?—The tooth after being fitted to the plate is fixed on with hard wax. It is then invested in a mixture of plaster of Paris and sand or pumice-powder, the latter being put in to prevent the plaster from cracking with the heat during the process of soldering. Care must be taken when investing to see that the tooth is properly covered, otherwise it might be cracked if the flame happened to play directly upon the exposed part. After the mixture is hard, it is trimmed up, taking care not to leave too much of the investing material about, otherwise the plate may be warped. The next thing is to heat off the wax, and this is done by pouring boiling water over it. The parts to be soldered are then cleaned, and borax applied and solder put on. The whole thing is then put on the fire or gas and allowed to heat up slowly. When thoroughly heated the blowpipe may be used to bring it up to a red heat—a strong blue-white flame being used first over the investing material; then a pointed white flame on to the solder. When the case is soldered it must be allowed to cool gradually before taking it from the investment. The plate may then be put into the cleaning acid to dissolve off the borax.

170/68. *T. H.*—The salicylic cure should not be used for Soft Corns. As good an application as any for them is a mixture of equal parts of soft soap and glycerine of starch applied nightly and kept on all day if possible.

105/2. *Mal de Dent*.—We have not published a formula for the preparation, and cannot at present recall the nature of it.

168/17. *F. E. J.*—Elixir of Exalg'in:—

Exalg'in . . . . .	93 grains
Rectified spirit . . . . .	1½ oz.
Sherry . . . . .	½ "
Syrup . . . . .	½ "
Saccharin . . . . .	5 grains
Orange flower water to . . . . .	4 oz.

Mix the spirit and sherry, and dissolve the exalg'in and saccharin in the mixture, then add the syrup and orange-flower water.

Dose, a teaspoonful or less.

109/46. *Dentine*.—Phosphate Tooth-filling.—This is so called because syrupy phosphoric acid is used for making the powder into a paste. The powder is a mixture of zinc oxide 2 parts, and calcined magnesia 5 parts. See THE CHEMIST AND DRUGGIST, August 23, page 343.

170/6. *W. H. S. S.*—While the mixture would be perfectly safe, we advise you to restrict its use to those above 10 years of age. For all below that you should recommend your special children's mixture.

169/9. *A. B. (Geneva)*.—Bay Rum.—The following is an excellent formula:—

Oil of bay ( <i>Myrica acris</i> ) . . . . .	33 minims
Oil of pimento . . . . .	3 "
Oil of cloves . . . . .	3 "
Acetic ether . . . . .	10 "
Rum . . . . .	10 oz.
Proof spirit . . . . .	10 "

Mix.

Syr. Hypophosphatum Co.—The B.P.C. formula is [that which is generally recognised now. It is:—

Quinine . . . . .	20 grains
Strychnine . . . . .	1 grain
Hypophosphorous acid . . . . .	2 drachms
Strong solution of hypophosphite of iron . . . . .	3 oz.

Dissolve and add

Hypophosphite of calomel . . . . .	80 grains
" " manganese . . . . .	40 "
" " potassium . . . . .	40 "

Dissolve, filter, and add

Syrup to . . . . .	1 pint
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This preparation keeps permanently clear if 10 grains of citric acid are added. To make the iron solution, dissolve 760 grains of sulphate of iron in 5 oz. of water, and 830 grains of hypophosphite of barium in 15 oz. of water. Add the latter to the former slowly, following up with 100 minims of dilute sulphuric acid. Shake, and set aside for two days, then syphon off the clear solution.

170/12. *K. I.*—There is no chemical test for lobelia other than separation of the active principle. As that is practically impossible in the case of cough-mixtures and the like, you must judge by odour, appearance, and therapeutic properties.

170/59. *F. M. W.*—Lime-juice and Glycerine.—We give this formula as one of many that we have:—

Almond oil . . . . .	12 oz.
Olive oil . . . . .	12 "
Fresh lime-water . . . . .	10 "
Saccharated solution of lime . . . . .	"
Oil of lemon . . . . .	2 drachms
Essence of jasmine . . . . .	2 "

Mix the oils in a W.Q. bottle, add the lime solution and the perfumes, and mix thoroughly by shaking.

170/26. *Pique*.—Yes, a good Children's Teething-powder without mercury is possible. This is what we would give:—

Powdered sugar . . . . .	100 grains
" milk sugar . . . . .	50 "
Oil of chamomile . . . . .	2 drops

Mix these thoroughly by triturating in a mortar for ten minutes, then add—

Antimonial powder . . . . .	15 grains
Carmines . . . . .	1 "

Again triturate for five minutes.

Dose: For a child of six months 2 grains at bedtime, and an additional half-grain for every three months thereafter up to eighteen months.

170/75. *C.*—See reply to "Hair-dye."

#### Information Supplied.

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*The Lancet*, August 29th, 1891.—CAFFYN'S MALTO-CARNIS—"The title sufficiently describes this preparation, and our examination confirms the description. From the presence of uncooked juice of beef, and consequently meat albumen, it turns semi solid on heating, and the cold filtered extract rapidly digests starch, while the presence of cocoa is evident to the taste. Analysis showed—mineral matter, 2.50 per cent. (rich in soluble phosphates); total solid matter, dried at 100° C., 66.28 per cent. Nutritious and stimulating elements like these are rarely found combined in so satisfactory a manner as in this new and interesting preparation of the Liquor Carnis Company."

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for its full development we look to those of the gentler sex who are just passing over the threshold of womanhood—girls, now in the most critical period of their lives, from whom Nature is demanding her dues, and who are usually only too carelessly prepared by their mothers and guardians for the changes taking place within them. How often we see young women pale, languid, complaining of palpitation, shortness of breath, headache, want of appetite, and indigestion! And if we inquire into their habits and mode of life, what do we find? Many are in service or in shops, shut up often for hours together in close, stuffy rooms; others in a town, leading an artificial life with balls, parties, &c., late to bed and late to rise—all have little healthy outdoor exercise, and all are sadly too fond of tea, cakes, and other confectionery. They pore for hours over novels and sickly sentimental stories, becoming weaker and weaker, until at last their friends take notice of their condition, and the tedious work of repair has to be commenced. The poor girl has to take her doses of iron, or it may be two or three Bland's Pills, three times a day, and very often beef tea also is ordered. Now, I daresay many persons, like the writer, do not like beef tea, and it will be a blessing to them to hear of a more palatable substance, which also has the great advantage which beef tea has not (as is well known)—namely, that of being nutritious. I mean Caffyn's Malto-Carnis,\* a preparation containing the nutritious Liquor Carnis, with a fat and heat producing carbo-hydrate, extract of malt, and a refreshing,

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\* Caffyn's Malto-Carnis.—"Analysis showed:—Mineral matter, 2.50% (rich in soluble phosphates); total solid matter, dried at 100° C., 66.28%. Nutritious and stimulating elements like these are rarely found combined in so satisfactory a manner."—*The Lancet*, August 29, 1891.

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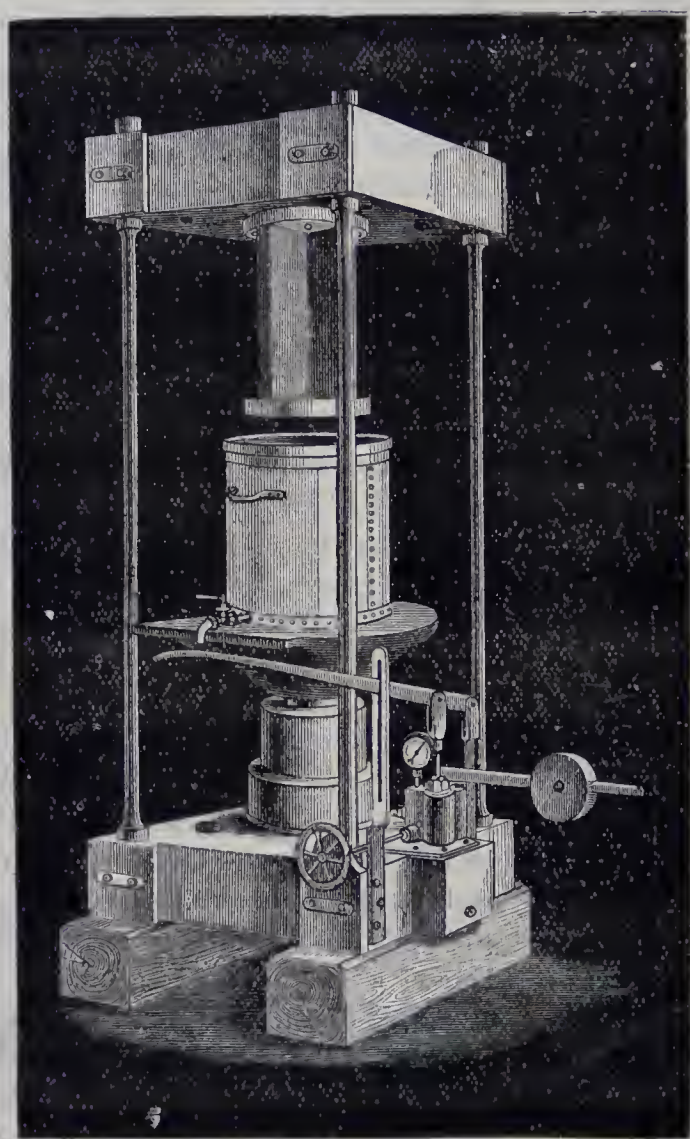
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**Liq. Calcis Iodinatæ.**—A solution of Hypiodite of Calcium. Very effective in curing Gout, Rheumatism, Syphilis, Strumous or Tubercular Disease, Goitre, &c. Highly antiseptic and deodorant. Dose—M. v to xx. Price, 4-oz. bottles, 1/2; 8-oz., 2/; 16-oz., 3/6

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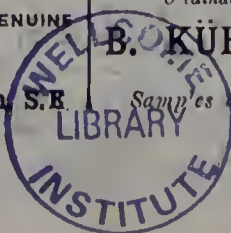
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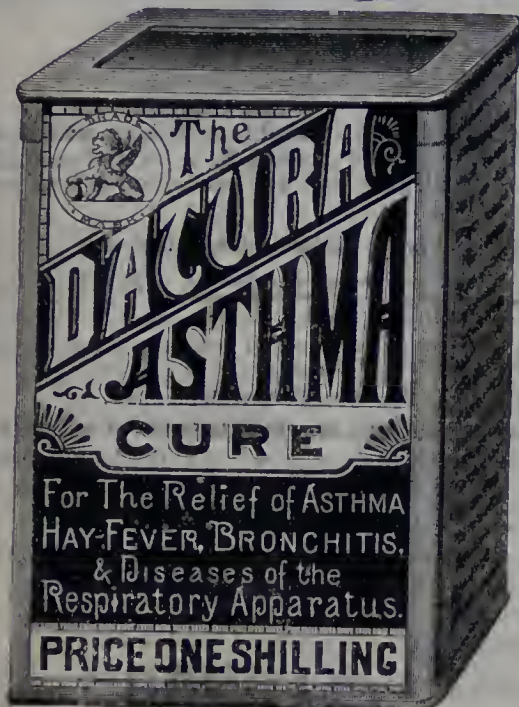






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# NATURAL GREY UNDYED "FURFELT" CHEST PROTECTORS.

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WE have claimed that these are the only Chest Protectors in the market which are manufactured in accordance with strict scientific principles, and are therefore the only goods of their class which can be sold with pleasure by a body of scientific men. The rapidity with which they have grown into favour shows us conclusively that our contention is endorsed wherever pains are taken to investigate it.

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It is an acknowledged fact that many otherwise beautiful children are disfigured by their prominent ears. By wearing the above Cap, which keeps the ears close to the head instead of crumpled forwards, this serious blemish is remedied. It also keeps the hair tidy at night, and is no irritation to the most sensitive child.

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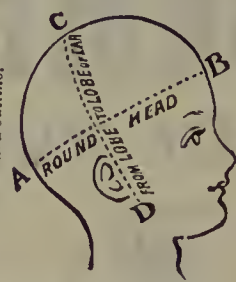
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**£100 REWARD** upon conviction of anyone infringing this, the only patent ear cap—over 5,000 sold in four months.

Directions for Measuring Head, required in order to find the correct outline.



From A round head B to A. From D over head C to opposite lobe D.

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# PURE PARA RUBBER BANDAGES.



GAUGE.	5 Feet.	7½ Feet.	10 Feet.	15 Feet.	21 Feet.
20 { 2½ in. ... 2/3	3/6	4/2	6/9	8/3 each.	
3 " ... 2/3	3/6	4/10	6/9	9/6 "	
22 { 2½ " ... 1/7	2/5	3/6	4/9	6/9 "	
3 " ... 1/11	2/11	4/	5/9	7/9 "	
25 { 2½ " ... 1/2	1/11	2/6	3/6	5/2 "	
3 " ... 1/6	2/4	3/2	4/2	6/6 "	

Perforated, 3/ dozen extra.



## POROUS BANDAGES.

GAUGE.	5 Feet.	7½ Feet.	10 Feet.	15 Feet.	21 Feet.
2½ in. ... 1/10	2/10	4/	5/3	7/8 each.	
3 " ... 2/3	3/4	4/6	6/6	8/10 "	

Subject to 10 % and 5 % monthly a/c.

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Patentee and Sole Manufacturer, **J. T. COCKING, PLYMOUTH.**

Jacket.

Cervical Jacket, No. 1. Cervical Jacket, No. 3.

### JACKET

(in cases of slight deformity)

#### INSTRUCTIONS

#### FOR MEASUREMENT.

Circumference at axilla.

" waist.

" hips.

Length from axilla to great

trochanter.

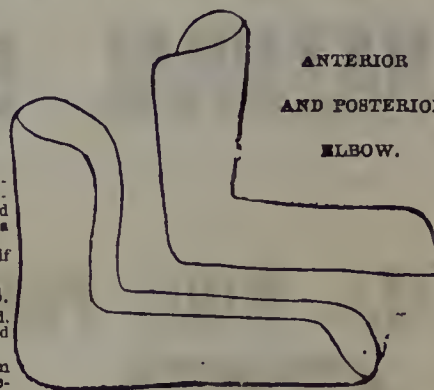
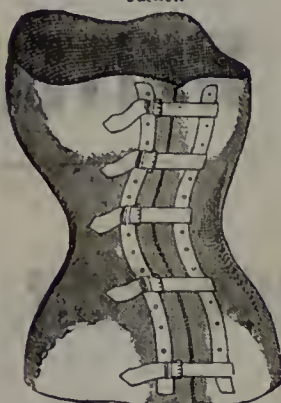
(In severe angular cases circumference over apex of curve, position of ditto, and contour should be given; in lateral cases a description of the case.

In all cases it must be stated if for male or female.

### CERVICAL JACKETS.

Same measurements required, and circumference at neck, and length from neck to axilla.

Any part of the Jacket can in the process of manufacture be left soft.



A FULL LIST OF SPLINTS AND PORO-PLASTIC IN SHEETS MAY BE HAD ON APPLICATION



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## FEEDING BOTTLES.

White Glass Screw-stopper Bottle, Best Black I. R. Fittings, Vulcanite Tap Regulator. Each in Card-board Box, with Tube and Bottle Brush. Complete, 8/6 per dozen.

Ditto, without Box and Brushes, 6/6 p-r dozen.

Green Glass Screw-stopper Bottle, Best Black I. R. Fittings, and Tin Tap Regulator, 4/ per dozen.

Green Glass, Boxwood-top Cork, Best Black I. R. Fittings, and Tin Tap Regulator, 3/6 per dozen.

Regulators, Vulcanite, 4/ per dozen; pure Tin, 1/6 per dozen.

Cheap Lines for Ordinary Feeders. Write for Price List.

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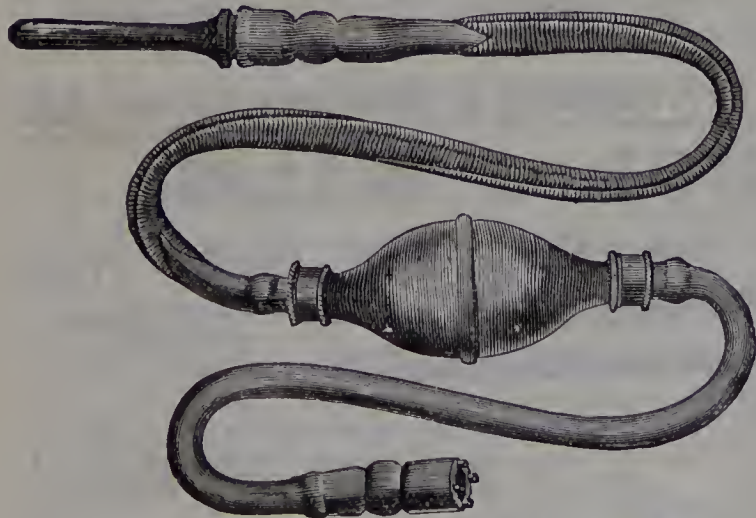
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Specially Bleached & Grey Carded Cotton Wools, Absorbent & Bleached & Grey Waddings; also Sheet Waddings, Tow, &c.

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This LINT, unequalled by any other, has been before the Public for nearly Forty Years, during which time it has been most extensively used in the British Army and Navy, in a large number of British and Foreign Hospitals, and by the Medical Profession. Its advantages are that, being made from fine Flax Fibre, it is perfectly free from all impurities, and, for Surgical purposes especially, is infinitely superior to Lint made from any other material; it also tears both ways. The One Ounce Packages will be found most convenient for Surgeons, Dentists, and the Public generally. It is put up in small Boxes, as a Razor Cleanser and Renovator, and for other Family purposes.

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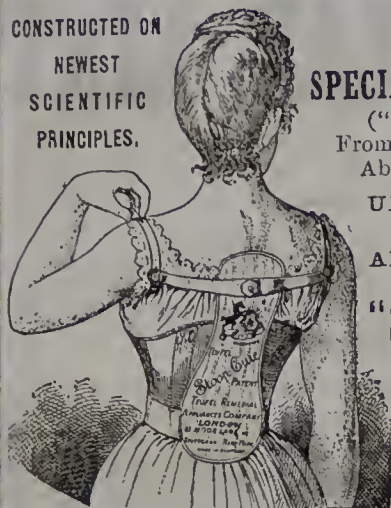


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IS THE ONLY DENTIFRICE APPROVED  
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	Size	Size	Size
EAU de BOTOT	1/6, 11/9;	2/6, 20/;	5/32/9 doz
POWDER	1/6,	8/6;	2/6, 17/ doz.
PASTE	1/6,	8/6;	2/6, 17/ "

Of all Wholesale Houses.

SAMPLE BOXES,  
Containing  
Powder, Paste, & Liquid  
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GLASS BOTTLE MERCHANTS,  
119 & 121 WOOD ST., LIVERPOOL.

		3 oz.	4 oz.	6 oz.	8 oz.	10 oz.	12 oz.	16 oz.	20 oz.	
Best Quality, Blue Tinted .. ..	8/	8/	8/9	8/9	12 6	14/	16/6	22	per gross.	
Ordinary " " .. ..	7/	7/	7/9	7/9	10 6	12/	15/	20		

SPECIAL QUOTATIONS GIVEN FOR WHITE FLINT.  
Ordinary shape Ovals or Flats, 3d. per gross less than the above prices, either quality.

Pure White Flint Glass Bottle, Screw Glass Stopper, Black Tubing and Teats	..	..	..	..	..	..	..	30/ per gross.
Green Flint Glass Bottle, Screw Glass Stopper, Black Tubing and Teats	..	..	..	..	..	..	..	28 6 "
" " Boxwood Top Cork, " "	..	..	..	..	..	..	..	23/ "

We supply a Special 6d. Feeder, White Flint Glass Bottle, Screw Glass Stopper, Glass or China Unions, best, Seamless Teat and Black Tubing, each Bottle in separate Box, with Bottle and Tube Brush, 48/ per gross.

*Very Heavy Pale Green Flint Panelled Bottles, suitable for  
Glycerine, Cough Mixture, &c.*

			2 oz.	3 oz.	4 oz.	
Boxwood Top Cork	..	..	11/6	13/	14/8	per gross.
Red Terra Cotta Cap	..	..	11/	13/	14/	"
Metal Screw Cap	..	..	13/6	15/6	18/	"

1½ oz., looks as large as	2 oz.	..	..	..	..	8/5 per gross.
2 oz.	"	3 oz.	..	..	..	9/5 "
3 oz.	"	4 oz.	..	..	..	10/ "
5 oz.	"	6 oz.	..	..	..	11/ "

ANY OTHER KINDS OF BOTTLE QUOTED CHEAP ON APPLICATION.

SPECIAL QUOTATIONS GIVEN TO SHIPPERS.

# G. B. KENT & SONS

Have been awarded the ONLY



A.D. 1777.

# GOLD MEDAL



At the Paris Exhibition, 1889, for  
**ENGLISH BRUSHES**

*See pages 177-178 SUMMER ISSUE, July 25, 1891.*

# GLASS BOTTLES.

**THE NEW SHAPE FLATS,** WITH **ROUNDED EDGES,** BEST  
QUALITY

3 & 4 oz.	...	...	7s. 9d.	per Gross.
6 & 8 oz.	...	...	8s. 9d.	„

**THE ORDINARY SHAPE—**

3 & 4 oz.	...	...	7s. 6d. per Gross.
6 & 8 oz.	...	...	8s. 6d. ..

ALL OTHER SIZES EQUALLY LOW.

A SAMPLE BOTTLE FREE ON APPLICATION.

The "NATIONAL FEEDERS," ready fitted, 2s. 6d. per doz.  
(First-class Bottles).

The "RELIANCE" Medicine-dropper, 2s. per doz.; each one in a separate box.

COUNTRY ORDERS RECEIVE PROMPT ATTENTION.

**I. ISAACS & CO.,** Glass Bottle Manufacturers,  
25 Francis St., Tottenham Court Rd., LONDON.  
*Established 50 Years.* Bankers—London and Westminster Bank

# PILL MACHINES

Those desirous of securing the best appliances for pill-making in large or small quantities should apply to

**G. W. NIBLETT, 26 Rainbow St., Southampton St., CAMBERWELL, S.E.**

# THE FOREIGN BOTTLE MANUFACTURING COMPANY.

144 and 147 NARROW STREET, LIMEHOUSE, LONDON, E.,

SUPPLY ALL KINDS OF

SUPPLY ALL KINDS OF  
**MEDICAL, PERFUMERY, OIL, SAUCE, &c., BOTTLES**

OF BEST QUALITY AT LOW PRICES.



# FEEDING BOTTLES.

---

Before placing orders the Trade are invited to get quotations from the undersigned, who can offer all descriptions on best terms, and where desired customers' names can be moulded on glass.

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SAVARS Feeders are Sold only by Chemists.

*QUALITY OF INDIARUBBER IS GUARANTEED.*

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**EVANS, SONS & CO.**  
**LIVERPOOL.**

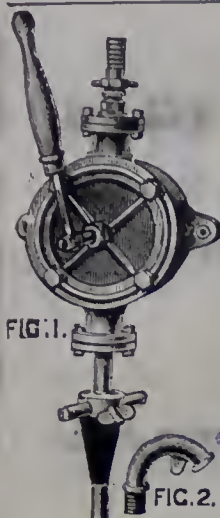
LONDON :

**EVANS, LESCHER & WEBB.**

CANADA :

**EVANS AND SONS, LIMITED.**





# BUY THE BEST OIL PUMP

AND SAVE

OIL, TIME, MONEY.

THOUSANDS IN USE.

Write for full particulars and prices of The  
"Farrington" Patent Oil Pumps to**PONTIFEX & WOOD, LIM.**

Shoe Lane, LONDON, E.C.

COME AND SEE GARDNER'S PATENT

## "RAPID" SIFTERS AND MIXERS

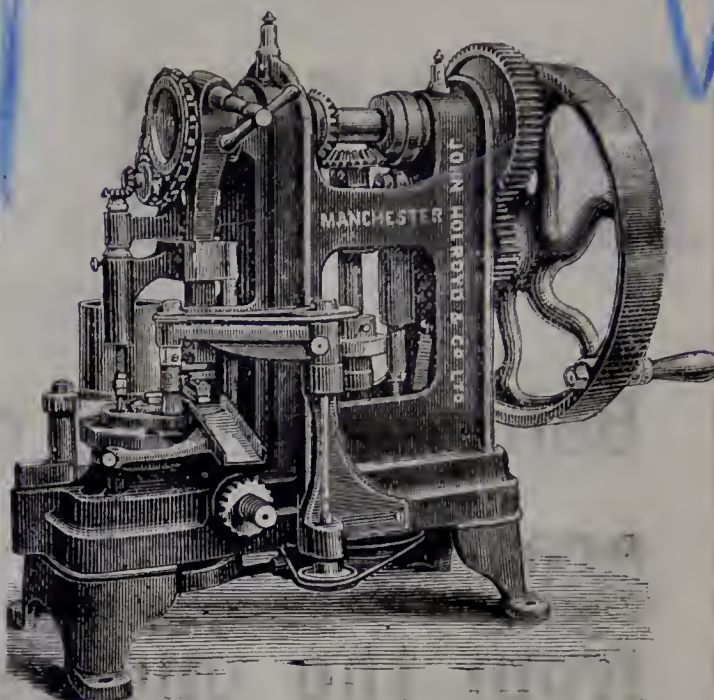
At Stand 36,

CATTLE SHOW,

BINGLEY HALL,

**BIRMINGHAM**

Nov. 28th to Dec. 4th, 1891.

**For Hand or Power.**Capacities from 15 to 1,400 lbs.  
at a time.**WM. GARDNER, Engineer, &c., GLOUCESTER.**Sole Licensees for Manufacture and Sale of McFerran's Improved  
Automatic Machinery for Making

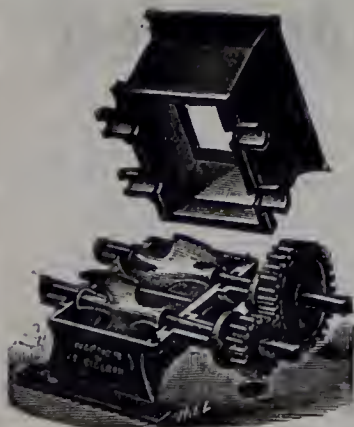
## COMPRESSED TABLETS

Of various shapes and sizes, from  $\frac{1}{2}$  gr. upwards. Nos. 4 and 5 Machines have  
been specially designed for**RETAIL DRUGGISTS.**

Write for particulars and prices.

[2]

Special Machines Manufactured to Contract for Inventors and Merchants.

**JOHN HOLROYD & CO., Lim.,** Tomlinson St. Works, Hulme, MANCHESTER.

Size 3, Type I, for 1-lb. Mass.

## THE "UNIVERSAL" KNEADING AND MIXING MACHINE

Pill Cutting, Pill Rounding, Pipers, and all other Machines for

### PILL MASS MAKING,

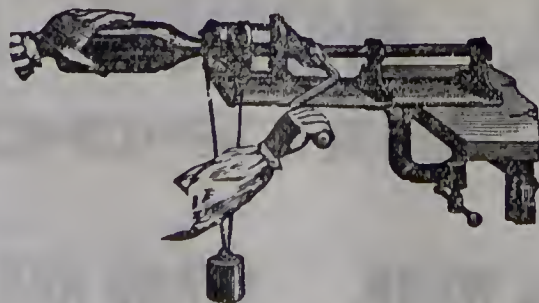
Also for Horse Balls, Tooth Pastes, Ointments, Soaps, Powders, and  
for general Mixing, Incorporating, Sifting, and Straining.

REPLACES WITH ADVANTAGE ALL OTHER APPLIANCES FOR THESE PURPOSES.

Made in various sizes, to do from  $\frac{1}{2}$  lb. up to 1 ton at a time.**WERNER & PFLEIDERER,** 86 Upper Ground St., LONDON, S.E.  
Blackfriars Bridge.

Contractors to the War Offices of all the Great Powers and other Governments.

## NEW CAPSULING MACHINE

The only Machine  
which leaves no crease  
or pleat on the  
Capsule.Can be fixed to any  
Counter.  
A single pull of the lever  
is sufficient  
to fix the Capsule.**Patentee—C. MELIN, 37 Crutched Friars, LONDON, E.C.**



# WILLIAM TOOGOOD'S

## WAREHOUSE AND SHOW ROOM,

### BURLINGTON BUILDINGS,

## HEDDON STREET, REGENT STREET, LONDON, W.

### TOOGOOD'S IMPROVED PATENT EARTHENWARE COVERED POTS

Are claimed to be the most  
perfect and convenient yet offered to  
the Trade.



Owing to the increasing demand  
for our Patent Pots, we have in-  
troduced a Special THIN Series  
for Dispensing.

These Pots are beautifully  
glazed and finished, and, being  
very light, are specially adapted  
for sending by post.

#### ORDINARY THICKNESS—

1 dr.	2 dr.	1/2	1	1 1/2	2	3	4	6	8 ounces.
1/6	1/6	1/6	1/8	1/10	2/	2/8	2/10	3/6	4/6 5/6 per doz.

#### THIN FOR DISPENSING—

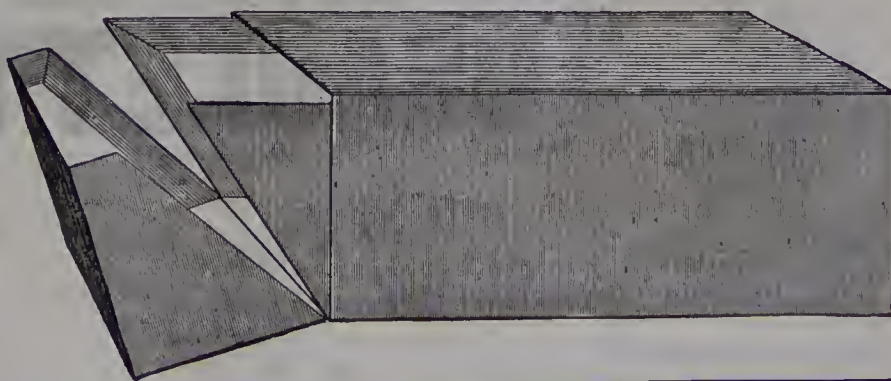
1/2	1	1 1/2	2	3	4	6	8 ounces.
1/7	1/9	2/	2/2	2/5	3/	4/	5/ 6/ per doz.

## TOOGOOD'S NEW REGISTERED SLIDE BOXES FOR POWDERS, &c.

REGISTERED No. 154,622.

### PRICES.

	For 6	12	18	24 Powders
White Enamel	6/9	7/9	8/9	9/9 gross
Purple ...	7/9	8/9	9/9	10/9 „



## TOOGOOD'S AIR-TIGHT AND GREASE-PROOF PAPER

FOR PACKING LINSEED MEAL, JUJUBES, &c. Demy size, 6/6 ream.

## TOOGOOD'S PATENT BRONCHITIS AIR KETTLE,

51/- per dozen.

SOLE AGENT FOR DR. LEE'S STEAM DRAFT INHALERS.



# MARVELLOUS SUCCESS.

## SALE STILL INCREASING.

HIGHEST AWARDS WHEREVER EXHIBITED.  
GOLD MEDAL, 1889.

BRONZE MEDAL, 1888.

(HIGHEST AWARD.)

SPECIAL AWARD, 1890.

SEE OPINIONS OF THE PRESS, AND TESTIMONIALS FROM ALL PARTS OF THE WORLD.

# PETAL DUST.

The Great Floral Air Purifier  
and Everlasting Perfume.

(REGISTERED)

### PRICES.

3d. Size, in Boxes containing	3 dozen	...	...	...	6s. 0d. per box	} 9
6d.       "               "	1       "	...	...	...	3s. 6d.       "	
1s.       "               "	1       "	...	...	...	7s. 0d.       "	

Order through your Wholesale House, or, CASH WITH ORDER, direct from SOLE PROPRIETORS—

## THE ROSMARINE MANUFACTURING CO., LONDON AND PHILADELPHIA.

LONDON OFFICE—54 STAMFORD STREET, LONDON, S.E.

CITY DEPOT—H. C. QUELCH, 1 LUDGATE SQUARE, LONDON, E.C.

Sole Agents for India—**ROWE & CO., RANGOON.**

## ORDER IN TIME FOR CHRISTMAS

TRADE MARK REGISTERED.

# "BEAULETTE."

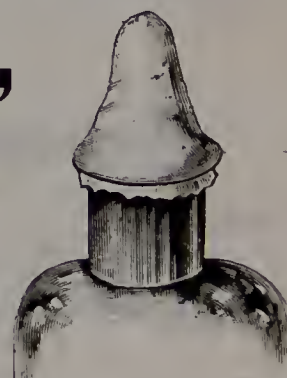
PATENTED.



WITH "BEAULETTE."



ACTUAL SIZE.



WITHOUT "BEAULETTE."

Under the title of "BEAULETTE" this ingenious little article has been invented to enable small manufacturers of perfumes and other similar preparations to finish their goods in equal style to those who employ skilled hands for the purpose. The woodcuts above show fully its advantages, and the cost being very trifling, it need hardly be pointed out that the general appearance of the goods and

## THE WINDOWS IN WHICH THEY ARE DISPLAYED

are very much improved by its use.

**DIRECTIONS.**—Hold the "BEAULETTE" flat against the neck of the bottle in a line with the centre of the label with the left hand, then loop the elastic ring over the stopper or cork with the right.

PRICE 4/- PER GROSS.

SOLD BY ALL THE LEADING WHOLESALE HOUSES.

Sample free on receipt of 1d. stamp to—

## BEAULETTE CO., 48 GREEK STREET, SOHO SQUARE, LONDON, W.

N.B.—THE WHOLESALE TRADE ONLY SUPPLIED DIRECT.



# The Chemist and Druggist

## SUPPLEMENT

Businesses Wanted.  
Businesses for Disposal.  
Premises to Let.  
Auction Sales.

SATURDAY, NOV. 28, 1891.

Partnerships.  
Situations Vacant.  
Situations Wanted.  
Miscellaneous.

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

Advertisements for this Supplement MUST be received at the Office by 5 o'clock p.m. on Thursdays.

A Copy of this SUPPLEMENT is sent to

**EVERY CHEMIST AND DRUGGIST IN BUSINESS IN GREAT BRITAIN;**

IS GIVEN TO

**ANY ASSISTANT WHO APPLIES FOR IT PERSONALLY;**

AND IS POSTED TO

**ANYONE CONNECTED WITH THE TRADE WHO SENDS A STAMPED ADDRESSED WRAPPER FOR IT.**

## CHEMISTS' TRANSFERS.

**MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C.**  
**CHEMISTS' TRANSFER AGENTS,**

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON SUBURB, E.—Good locality; old-established Business; situate in a good position; returns last year nearly £1,000, increasing; profits above the average; large and convenient shop; good house, held on long lease; about £850 required.

2.—LONDON, W.C.—Death vacancy; small Retail and Prescribing Business; returns about £600 yearly, very profitable; large house attached; well-fitted shop and good stock; about £200 required, or offer considered.

3.—LONDON, N.W.—Main road; good-class increasing Dispensing Business; returns about £500 yearly, with nearly £200 net profit; well-fitted shop and good stock; good house attached; about £400 required.

4.—LONDON, N.E.—Good-class Retail, Prescribing, and Family Business; returns last year £658, with good profits; well-fitted shop and good stock; good house and garden; terms to be arranged; worth attention.

5.—LONDON (West Central).—Good business locality; Retail and Dispensing Business of good class; returns nearly £1,100 yearly, with profits above the average; single-fronted, well-fitted shop, and good stock; about £800 required.

6.—HOME COUNTY.—Good locality; Mixed Business; old-established concern; situate in a first-class position; returns between £1,200 and £1,300 yearly; good house and commodious business premises; terms, small premium and valuation.

7.—SOUTH OF ENGLAND.—Fashionable town; season just commencing; good-class Dispensing Business; returns about £2,000; handsome shop and good house, on lease; purchasers prepared with about £2,000 will receive full particulars on receipt of reference.

8.—WARWICKSHIRE.—Good residential locality; Retail and Dispensing Business of good class, with good family connection; returns last year £1,350, with good profits; well-fitted shop, large house, garden, &c.; about £1,300 required.

9.—SOUTH COAST.—Good-class Dispensing and Retail Business; established many years; returns £700 yearly, with good profits; large well-fitted shop and good stock; about £575 required.

10.—SOUTH DEVON.—Seaport town; Light Retail, Dispensing, and Prescribing; returns £450 yearly, with good profits; good-size house; rent £35; small garden attached; about £450 required, or offer considered.

11.—YORKSHIRE.—Light Retail and Prescribing Business; all cash; returns £700 yearly; net profit 33 per cent.; situate in a prominent position; handsomely-fitted shop and good stock; very low rental; terms, valuation of stock and fixtures only.

12.—SOUTH OF ENGLAND.—Good business town; Light Retail and Dispensing; returns last year £450; convenient house; good shop, fairly stocked; about £300 required.

13.—STAFFS.—Good business town; Light Retail and Dispensing of good class; returns last year about £1,100; vendor will give a personal introduction if wished; about £850 required.

14.—SOUTH COAST.—Fashionable town; good-class Retail and Dispensing Business; returns nearly £500 yearly; convenient house; special reasons for sale; offer wanted.

**Particulars of any of the above will be furnished on application.**  
**N.B.—NO CHARGE TO PURCHASERS.**

Other Businesses, Town and Country. Particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.

Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the special attention of a London Agent.

**NOTICE.**—Messrs. ORRIDGE & CO. have a large number of Businesses for Sale, suitable for Gentlemen with Small Capital. Full particulars on application.

**SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.**

Messrs. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.  
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## F. J. BRETT,

### VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

**BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS, 20 YEARS' EXPERIENCE. NO CHARGE TO BUYERS.**

**STOCKTAKING UNNECESSARY.**—Stocktaking is always dreaded by Chemists, and with a competent Valuer is not necessary.

F. J. BRETT is prepared to estimate or to value entire stocks as they stand with little or no inconvenience to ordinary business, and has repeatedly done so with entire satisfaction to those adopting this mode.

**STOCKS AND FIXTURES BOUGHT FOR CASH.**

**£1,400 RETURNS.**—Good General Retail in commanding position of good Midland town; an energetic man could soon do £200; price about £700.

**£700 RETURNS.**—Lark district; no opposition for six miles; net profit £250; price £350.

**YORKS.**—Branch Retail, returning now under poor management £350; good man could double in a month; price £150.

**NORFOLK.**—Unopposed good-class Retail; returns £550; good house, garden, &c.; rent £20 on long lease; price £350.

**YORKS.**—Returns £550; best position of manufacturing town; valuation about £350.

## MESSRS. BERDOE & CO.

CHEMISTS' TRANSFER AGENTS &amp; VALUERS,

30 JEWRY STREET, ALDGATE, E.C.

Established 1870.

### SPECIAL NOTICE.

**VENDORS** are particularly requested to note that in placing Businesses in our hands for disposal, they are not required to sign any unusual agreement. Our forms for particulars and terms (which have always been the same) may be had on application.

**VALUATIONS AND TRANSFERS** conducted in any part of the United Kingdom. Twenty years' practical experience.

### NO CHARGE TO PURCHASERS.

**WEST OF ENGLAND.**—Market town; Retail, Dispensing and Agricultural; returns £2,400; net profits £500; low rent; good house and garden; price £1,400; owner retiring after 20 years' occupation.

**EASTERN COUNTY.**—Retail, Dispensing and Prescribing Business; returns £700 at full prices; large house and garden; low rent; modern shop fitted in mahogany; good stock; price £500, or offer.

**SUSSEX.**—Good-class Light Retail and Dispensing Business; returns about £800, with net profits above the average and steadily increasing; convenient house and garden; price £775.

**BIRMINGHAM** (Best Suburb).—Light Retail and Dispensing Business; returns nearly £1,400; net profit £600 yearly, after paying all expenses; good house and garden; owner retiring; price £1,100.

**SOMERSET.**—Good Market town; old-established Retail, Dispensing, and Prescribing Business; returns £650; rent £30; 9-roomed house; former owner retired; price £450; heavily stocked.

**YORKSHIRE.**—Good-class Light Retail and Dispensing Business; same hands, many years; returns £850; net profit nearly £350; large shop; good house and garden; small premium and valuation required.

**HOME COUNTY.**—In a most delightful locality; First-class Dispensing Business, very much neglected; returns £500, but can be greatly increased; excellent house; large garden; valuation terms can be arranged.

**BOURNEMOUTH.**—Unopposed Retail, Dispensing, and Prescribing Business, returning £900, and steadily increasing; good house; double-fronted, well fitted and stocked shop; price £650, or offer.

**PORTSMOUTH.**—Good-class Light Retail and Prescribing Business; returns £450; rent £23; convenient house; selling through illness; good shop, well fitted and stocked; price £300.

Particulars of any of the above sent free on application.

Other Businesses, Town and Country, from £100 to £5,000.

Messrs. Berdoe & Co., 30 Jewry St., Aldgate, London, E.C.

## BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

Please note that advertisements under this heading must be received at the office not later than 5 p.m. on Thursdays.

**FOR** sale, owing to the death of the late proprietor, an old-established Retail and Prescribing Business, in a busy and populous neighbourhood; good profits; low rent. Apply personally, 91 Hoxton Street, N.

**LANCASHIRE.**—Well-established Chemist and Druggist's Business in a large manufacturing town within 12 miles of Manchester; satisfactory reasons for disposal. Apply, R., c/o T. Woolley, Sons & Co., Wholesale Druggists, Manchester.

## Messrs. CROCKER & CO.

Trade Valuers, Transfer Agents, and Accountants,  
15 WALBROOK, E.C.

**LANCASHIRE** (Sensido).—Good-class Retail and Dispensing; returns £250; price valuation of stock and fixtures.

**WEST OF ENGLAND** (fashionable health resort). Old-established Retail and Dispensing; returns £1,200; price £1,200.

**SURREY.**—Light Retail and Dispensing; returns £800; price £650; good house; handsome Pharmacy; agency pays rent.

**KENT.**—Good-class Family and Dispensing; returns £850; price £700; long lease at a low rent; good house.

**HOME COUNTY.**—Light Retail and Dispensing; returns £400; low rent; price £320; large and convenient house, with nice garden.

**DEVON.**—Old-established Retail and Dispensing, with good sale of own Specialities; returns £600; price £450; good house and garden.

**KENT.**—Family and Dispensing trade, with Post Office; returns over £800; price £600; large house and garden.

**BUCKS.**—Light Retail and Dispensing; very low rent; returns £450; price £350; good house and garden; worth attention.

**MIDLANDS.**—Retail, Dispensing and Prescribing; returns £500; price £200; double-fronted handsome pharmacy.

**CORNWALL.**—Retail and Dispensing Business, with general Mixed business attached; returns £3,600; steadily increasing; large house, low rent; price about £1,500; satisfactory reasons for selling.

**CHESHIRE.**—Old-established country trade; returns £1,000; price, valuation only; large and convenient house; rent £40.

**HANTS.**—Light Retail and Dispensing; returns £400, and increasing; large and convenient premises, held on long lease at a very low rental; price £200.

**LONDON, N.** (Main Road).—Good-class Retail and Dispensing; returns £400, and can be doubled with ordinary attention; price £200 to a quick buyer.

**LONDON, S.E.**—Retail and Prescribing trade; unopposed position; returns £500; price £400; rent £40; good house, &c.

**LONDON, N.**—Good-class Family Business; Retail and Dispensing; returns about £850 yearly; handsome shop and good stock; price £600.

**LONDON, N.**—Old-established Retail, Prescribing, and Dispensing; many years in same hands; returns £570; price £500.

**KENT COAST.**—Good-class Retail and Dispensing Business, in favourite health resort; returns £900, rapidly increasing; price £800.

**HANTS.**—Light Retail and Dispensing; returns £700, and increasing; large, convenient premises; nice garden; low rent; price £450.

**LONDON, S.**—Good-class Retail and Dispensing trade; returns £500; low rent; price £350; capital position in marketing thoroughfare

### NO CHARGE TO PURCHASERS.

VALUATIONS A SPECIALITY. TERMS ON APPLICATION.

## BUSINESSES FOR DISPOSAL—Continued.

**FOR** disposal, a small Wholesale Druggist's Sundry Business in provinces; proprietor retiring; a good opening for an energetic business man with capital. Address, "Delta," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**FOR** disposal, the Business of the late G. B. Howorths, Irthlingborough, Northampton; returns between £7 and £8 per week; handsome fittings; well-assorted stock; no other Druggist; rent £16 10s. per annum. Address, Howorth & Parkin, Doncaster.

**OLD-ESTABLISHED** Chemist and Druggist Business in populous district of Glasgow for sale; shop is in leading thoroughfare, and has good consulting-room; rent only £23. For particulars, apply to Maclean, Peattie & Macintyre, Writers, 175 Hope Street, Glasgow.

**IN** a rising seaside resort, on South Coast; genuine Mixed Retail and Dispensing Business, returning £900, and steadily increasing; no opposition whatever; price very moderate to an immediate purchaser. "Resort," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**CHESHIRE.**—An old-established, high-class Retail and Dispensing Business; returns a little over £1,000; stock and fixtures at a valuation; large house at moderate rent; satisfactory reasons for disposal. Address, A.B., c/o Messrs. Woolley, Sons & Co., 69 Market Street, Manchester.

**OLD-ESTABLISHED** Business in main thoroughfare, S.E.; populous locality; suit active man; valuable Proprietary Medicines and Recipes; cash trade; ago cause of disposal; terms given on personal interview. Address, J. J., Miss Atkinson, 40a King William Street, London Bridge, E.C.

**GENUINE** old-established Dispensing and Retail, in a Cornish town, unopposed, at low price, to an immediate purchaser; returns under management over £300; very profitable at full prices; large house and garden, only £20; minor dentistry much wanted; price £225. "The Manager," Fore Street, Lostwithiel.

**SSEX.**—In a well-known watering-place, a small compact Dispensing and Prescribing Business, well stocked and fitted, with Dentistry attached; a good opportunity for an energetic man with small capital; returns average about £5 a week; can be increased; price £100 cash. James, 68 Park Street, Southend-on-Sea.

**IMMEDIATE** disposal, Light Retail on leading thoroughfare, Manchester; rent moderate; the business has been much neglected of late, and to an energetic man with small capital it offers a good opportunity; may be viewed at any time. For further particulars, apply to Mitchell, Auctioneer, 27 Hyde Road, Manchester.



## SITUATIONS WANTED—Continued.

**SENIOR**, or Locum Tenens; aged 29; Minor and Hall qualification. O. H., 21 Nelson Street, Greenwich, S.E.

**JUNIOR**, in first-class business; Minor; 21½; excellent reference. Male, 3 Methley Street, Kennington, S.E.

**ASSISTANT** (24); qualified; good references; London preferred. "Minor," Hill Farm, Flintham, Newark.

**ASSISTANT**; good prescriber and extractor; highest references. J. R. H., 65 St. John's Road, Bootle, Liverpool.

**ASSISTANT**; experienced; 27; time for study; Prescriber, Extractor. J. Oswald, Post Office, Bowdon, Cheshire.

**MANAGER** or otherwise; qualified; 3 years' London experience; good references. H. Scott, 105 Regent's Park Road, N.W.

**MANAGER** or Assistant (outdoors); extract; married; disengaged; aged 37. W. W., 136 Downham Road, Southgate Road, N.

**ASSISTANT**, aged 22; qualified; in good-class business; outdoors preferred; disengaged. W. H., 1 Clipstone Avenue, Nottingham.

**AS** Manager; must be with option of early purchase; aged 29; qualified. "Chemist," c/o Henry Ebbage, Framlingham.

**REQUIRED**, a situation as Traveller for a good Drug house or Sundries; guarantee given. Evans, Chemist, Aberystwith.

**MANAGER** or Senior; aged 31; qualified; single; abstainer; would assist for Minor. "Instantan," The Nelems, Chingford, Essex.

**ASSISTANT** (25), experienced, desires re-engagement, Christmas; wholesale preferred; good references. "Radix," 6 Sydney Terrace, Rochester.

**LOCUM TENENS**.—Situation wanted for 3 weeks or month. qualified; experienced; good references. "Antipyrin," High Row, Reeth, Yorkshire.

**BRANCH** Manager or Senior; first-class business; aged 38; unmarried; comfortable permanency; Minor. A.B., Mr. Coleman, Llanymynech, Oswestry.

**MANAGER**, Traveller, or Outdoor Assistant; 4 years in present situation; aged 34; married. "Kent," 70 Beckenham Road, Beckenham.

**MANAGER**; permanent or temporary; extensive experience in all branches. "Pharmaceutical Chemist," Sumner & Co., 40A Lord Street, Liverpool.

**MANAGER** or Dispenser; middle aged; single; pushing man; good Prescriber; good reference. W. R., 13 Duke Street, Manchester Square, W.

**WHOLESALE** Manufacturing; good-class all-round experience; unexceptionally references; disengaged. "Marcenta," 30 The Bayle, Folkestone.

**WANTED**, a situation as Manager for a small business; mixed not objected to, or a branch; good references. Mason Walton, No. 6 Well Road, Oxford.

**BRANCH** Manager; good Prescriber and Tooth Extractor; thoroughly experienced; good references. A., 63 Worcester Street, Higher Broughton, Manchester.

**DISENGAGED**; Branch Manager, Dispenser, or Surgeon's Retail; aged 40; highest references; married, no family. "Quinine," 53 Midway Street, N.

**AS** Assistant; Minor; 25; well qualified for quick dispensing and retail. "Statim," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant in good-class Retail and Dispensing business; accustomed to dispensing, prescribing, and extracting. "Alpha," 4 High Street, Newport, Mon.

**REQUIRED**, situation in a Laboratory or Chemical Works, as Analyst; certificates. Address, "Acid," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**A YOUTH** (21), having only little experience, will give his services in return for board and residence; London district. A. D., 10 Cowley Street, Westminster, S.W.

**GENTLEMAN** calling on Chemists in London and Suburbs is open for commission to sell S.V.R. "Stylo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Assistant, or Dispenser to Medical Man; London; small salary; time for study principal object; disengaged early in December. C. D., 61 Chalk Farm Road, N.W.

**ASSISTANT** or Manager; aged 27; good Prescriber and Dispenser; 11 years' varied experience; Manchester or district. "Radix," 2 Upper Medlock Street, Greenhays, Manchester.

**AS** Assistant; unqualified; competent; upwards of 12 years' good practical West end experience in Dispensing, Retail, and Prescribing. "Nemo," 48 Vleerage Road, West Ham Park.

**TRAVELLER**, Drugs or Sundries, &c.; connection; references; South-East Coast; good salesman; guarantee. Z., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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**ASSISTANT**; part time; aged 24; London preferred; outdoors. "Rumbo," 123 Lisson Grove, N.W.

**DISENGAGED**; qualified; aged 25; 5 feet 6 inches. W. M. James, High Street, Market Drayton.

**ASSISTANT** or Branch Manager; outdoors; permanency; qualified. Y., 44 Stansfield Road, Stockwell, S.W.

**IMMEDIATELY** as Improver; 3 years' experience; particulars. Smith, 47 Westgate Street, Gloucester.

**JUNIOR** Assistant (20); 5½ years' experience; outdoors preferred; good references. "Radix," 43 Lynette Avenue, Clapham, S.W.

**ASSISTANT**, until May; 34; qualified; thoroughly reliable and steady; moderate salary; disengaged. "Minor," 8 Castle Street East, Oxford Street.

**RE-ENGAGEMENT** as Traveller, Drugs or Sundries; married; unqualified; no objection to working Retail and Surgeon's Wholesale; aged 22. "Rhei," 40 Portland Street, Taunton.

**ELLIOTT**, L.P.S.I., Pharmaceutical Chemist, 37 Drummond Street, Euston Road, N.W., open to engagement; Extracting and Dispensing thoroughly; assist in Operations if required.

**WANTED**, a situation as Junior or Improver, by a young man just out of his apprenticeship; aged 19; height 5 ft. 11 in; outdoors and London preferred. F. Cherry, Bloxham, Banbury, Oxon.

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**SWISS** Gentleman, speaking French, German, and a little English, fully qualified Chemist experienced in dispensing, seeks engagement as Assistant (indoors); small salary required. Address, Dr. Goldlin, Rue Holbein 7, Bâle.

**SITUATION** wanted in Pharmaceutical work; one thoroughly experienced in all Scale Preparations, also Infusions, Extracts, &c.; 15 years' good experience. F. O., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AS** Manager (or Senior); London or South Coast; branch or outdoor preferred; 14 years' first-class London and provincial experience; Minor; height 5 ft. 7 in.; good references. J. P., Rothbury House, West Hill Road, Bournemouth.

**DRUGS** and Chemicals.—Gentleman with long experience and large connection wishes situation either as Traveller or Manager for a Wholesale Export firm; knows English, German, French, Spanish, and Italian. Address, G. E. R., Messrs. Deacon's, Leadenhall Street, London.

**COMMISSION** in Specialities wanted by a gentleman with an established connection with Wholesale and Retail Chemists and Druggists in Lancashire, Yorkshire, Scotland, Ireland, &c., to work in conjunction with one already held many years. Address, "Agent," care of Mr. T. W. Wilkinson, 9 Brighton Terrace, Balsall Heath, Birmingham.

**TRAVELLER**.—A gentleman of experience, excellently well known by all the leading Chemists, Wine Merchants, &c., on the South-west and South ground, desires additional work on commission and part expenses; no objection to up-hill work, if good; samples must be light. Address, 171/36, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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**WANTED**, by Christmas, Improver or Turnover, in good-class General business; short hours; time for study allowed. Apply, with particulars, to Green, Christchurch, Hants.

**DISPENSER**, by a firm of Surgeons; must have had good experience and be able to furnish satisfactory references. State age and salary required to Bradley & Bliss, Wholesale Druggists, Reading.

**HAMBURG**.—Wanted, by first-rate Drug house, Agent visiting the Druggists daily. Offers, with references on Drug houses, to H. 09103, care of Haasenstein & Vogler, A. G., Hamburg.

**PART-TIME** Assistant, of gentlemanly manners and address, for London suburban business; about the middle of December. Apply, E. T., care of Messrs. Barron, Harveys & Co., Giltspur Street, E.C.

**WANTED**, competent man for Pharmaceutical and Laboratory work in Mexico; thorough knowledge of Spanish essential; three years' engagement; liberal terms. Apply, W. J. B., 16 Oldem Street, E.C.

**ASSISTANT**, aged about 20 or 21, for General Light Retail; to give his whole time; salary £30 or £35. Apply personally, or enclosing carte, stating height, age, salary, &c., to Taplin, 91 Hampstead Road, London.

**WANTED**, at once, a Junior; aged 19 to 21. Apply, stating age, height, salary required, reference, enclosing photo (to be returned), to Robert Gallier, Chemist, 1 Carfax, and 1c Queen Street, Horsham.

**ASSISTANT** (outdoors), smart and energetic, for Cash business; no Sunday duty. Applicants please enclose photo, if possible, and state salary, references, and full particulars to Messrs. W. Inman & Co., Edinburgh.

**ASSISTANT** wanted; aged 25 to 30; competent; used to quick or store trade preferred; indoors; hours short; high-class Retail and Dispensing. Apply, with full particulars, to W. D. Gibb, Chemist, 31 Piazza, Winchester.

**WANTED**, immediately, an Assistant (indoors), for a Mixed Retail and Dispensing business, near Manchester. State salary required, experience and references, 173/5, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**AN** Assistant (indoors); December 25; aged about 21; for a good-class Retail and Agricultural business. Apply, stating age, height, salary required, reference, enclosing photo, to George Bett, Pharm. Chemist, 25 The Walk, Norwich.

**URGENT**.—As Dispensing and Retail Assistant, an active young man, about 30; Minor qualification will do; one having some previous experience in Light Wholesale preferred. Apply personally to B. Drew & Co., 277 Borough High Street, S.E.

**REQUIRED**, in a Manufacturing Pharmaceutical Laboratory, a young qualified Pharmacist as Assistant. Apply by letter, stating age, salary, and full particulars as to experience, to A. Y., c/o Crossley, Moir & Co., Advertising Agents, 57A Coleman Street, E.C.

**GENEVA, SWITZERLAND**.—Wanted, First Assistant, of good address and appearance, speaking French fluently; must be used to high-class international Dispensing business. Offers, with photo, to the Anglo-American Dispensary, 13 Rue des Allemands, Geneva.

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**TO** Chemists and Druggists. — Agents Wanted. — Pearce's Royal Aromatic Horse and Cattle Food require reliable Agents in every district not represented; liberal terms; established 1850. Address, Pearce & Co., Manufacturing Chemists, 46 Market Street, Manchester.

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**AS** Assistant; aged about 23; with Minor qualification; must be a good Counterman, and well up in Dispensing and Prescribing; outdoors. Apply, by letter in first instance, stating salary required, height, age, &c., to A. J. Holmes, Pharmaceutical Chemist, Upton Park, E.

**MANAGER**.—Wanted, a qualified Assistant (outdoors), for a good business in the suburbs of Birmingham; he must produce good references as to character and ability. Applicants to state age, and to give references, &c., to "Subarbs," care of Southall Bros. & Barclay, Birmingham.

**A** COMPETENT and Reliable Assistant; qualified; good Salesman and Prescriber essential; liberal terms to a conscientious man desiring a permanency, eventually to take management. Apply personally (if by letter, particulars of experience, salary, age, height, photo) to Ralph Hall, 552 Kingsland Road.

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**ASSISTANT**, as Manager for a Mixed Retail; Minor qualification; able to extract teeth and prescribe; about 30; married man preferred; house, gas, water, and rates free; hours 8 to 8, 10.30 Saturdays, no Sunday or night business; references required; correspondence invited. "Chemist," 19 Leeds Bridge, Leeds.

**WANTED**, for a Drug and Dental Store, a qualified Assistant; one wishing to learn Dentistry preferred; 300 pieces turned out annually; splendid chance to anyone wishing to add this valuable adjunct to his trade; 6 months' engagement required; apprentice kept. Apply, Sylvester Richardson, Stockton-on-Tees.

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**A** CHEMIST in a provincial town requires an energetic, experienced, able Assistant, able and willing to work on equal terms with another, with a view to relieving the principal of constant supervision, and eventually of continuing the business. State full particulars to "Nemo," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**EXPERIENCED** Assistant, as indoor Senior; active; unmarried; good Counterman, and seeking permanency; unexceptionable references indispensable. Apply, stating age, height, experience, references, salary required, and when disengaged, &c., to G. Shepperley, Pharmaceutical Chemist, Market Place, Nottingham. Applications not answered within three days declined.

**ASSISTANT** wanted in good-class Retail, Dispensing, and Agricultural business; country town, West of England; comfortable home; senior and apprentice kept; fortnightly half-holiday; aged about 25; must be of smart business habits and gentlemanly address; able to take charge of Branch business during holidays; abstainer and non-smoker preferred. State full particulars, experience, age, height, and salary required, enclose photo (to be returned); only those having undeniable references and seeking a progressive permanency need apply to "Cinchona," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

**TO STUDENTS**—Three hours' daily Laboratory Practice (Chemical) offered in exchange for 3 hours' Retail help daily. Tram to Wills' and Muter's for lectures. "Pharmacist," 69 Loughborough Road, Brixton, London, S.W.

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1s. for twelve words; 6d. for every six words beyond.

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**AS** Assistant in East-end business; 27; outdoors. M. S., 38 Gieble Place, Chelsea.

**AS** Assistant; (25); good Counterman and Dispenser. Home, 4 Swan Hill, Shrewsbury.

**ASSISTANT** (24); tall; qualified; disengaged. S. K., 48 Waldemar Avenue, Fulham.

**JUNIOR**; (20½); 4 years' experience; London only. Jackson, 91 Hampstead Road, N.W.

**MANAGER** or Outdoors; qualified and registered. Davies, 100 Brixton Hill, London.

**QUALIFIED** (21½); short; highest references. Smith, 109 Round Hill Crescent, Brighton.

**LOCUM**, Senior, or Manager; qualified; 28; disengaged. Robinson, 19 Reedworth Street, S.E.

**LOCUM-TENENS**; qualified; first-class references. "Locum," Trinity Square, Llandudno.

**MANAGER** or Locum-Tenens (45); qualified, experienced, reliable. Williams, 70 Ledbury Road, W.

**ASSISTANT** or Branch; 23; Minor qualification. B., The Manor, High Easter, Chelmsford.

**LOCUM**, or Temporary; long, varied experience; 30; abstainer. 1 Alexander Terrace, Guildford.

**MANAGER** or Traveller; married; 33; qualified; good references. "Pituita," Post Office, Sheffield.

**TEMPORARY**; in or out doors; now disengaged; 39. Davies, 73 Tabley Road, Tufnell Park, N.

**WANTED**, situation as Branch Manager; qualified. "Chemious," 58 Blessington Road, Liverpool.

**MANAGER** or Assistant (28); married; permanency. H., 17 Sumpter Pathway, Hoole, Chester.



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**AT** once (through unforeseen circumstances) a splendid corner, double-fronted shop, rare and commanding position, where a good trade can be done; first-class stock, mahogany fixtures; a commanding shop; offered at valuation; no goodwill; about £200 required. M. P. S., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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**WANTED**, to purchase a good General Retail and Dispensing Business, returning from £1,000 to £1,500; a good thoroughfare in Birmingham or the county of Warwickshire preferred. Address, "Warwick," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

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**A** JUNIOR Assistant; outdoors. Apply personally, or by letter, to R. H., 70 Kennington Park Road, S.E.

**J**UNIOR in Wholesale required by Reynolds & Bransen, 13 Briggate, Leeds; state age, experience, references, and salary required.

**J.** KENN ROBERTS, St. Helen's Pharmacy, Swansea, wants an Apprentice or good Junior; must have passed Preliminary exam.

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**C**HARLES POTTS, Chemist, &c., Ilkeston, requires active, obliging Assistant for Mixed business; married; state age, reference; one seeking a permanency.

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**J**UNIOR Assistant wanted; outdoors; must have good references. State full particulars, age, height, and salary required, Markham & Co., Market Place, Darlington.

**W**ANTED, good Pill-makers. Apply, by letter only, stating experience and wages required, to "Manager," H. & T. Kirby & Co. (Limited), 14 Newman Street, W.

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**M**R. T. T. AIME, Chemist, Bordighera, wants, at once, an English Assistant for the winter season, till April 1; board and lodging, and salary to arrange with the chemist.

**Q**UALIFIED Assistant; outdoors; entire charge of Dispensing-room. State usual particulars, Wand, Haymarket, Leicester. Also opening for tall, active Counterman.

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**A** COMPETENT Assistant (outdoors); hours 12.30 A.M. to 10.30 P.M.; must be energetic and have good references. Apply, Vause's First-class Drug Stores, 297 Edgware Road, London, W.

**W**ANTED, an Assistant, about 24; must be competent and have good references. Apply by letter, enclosing carte (which will be returned) and particulars, T. Linay, 2 Fernhead Road, St. Peter's Park, W.



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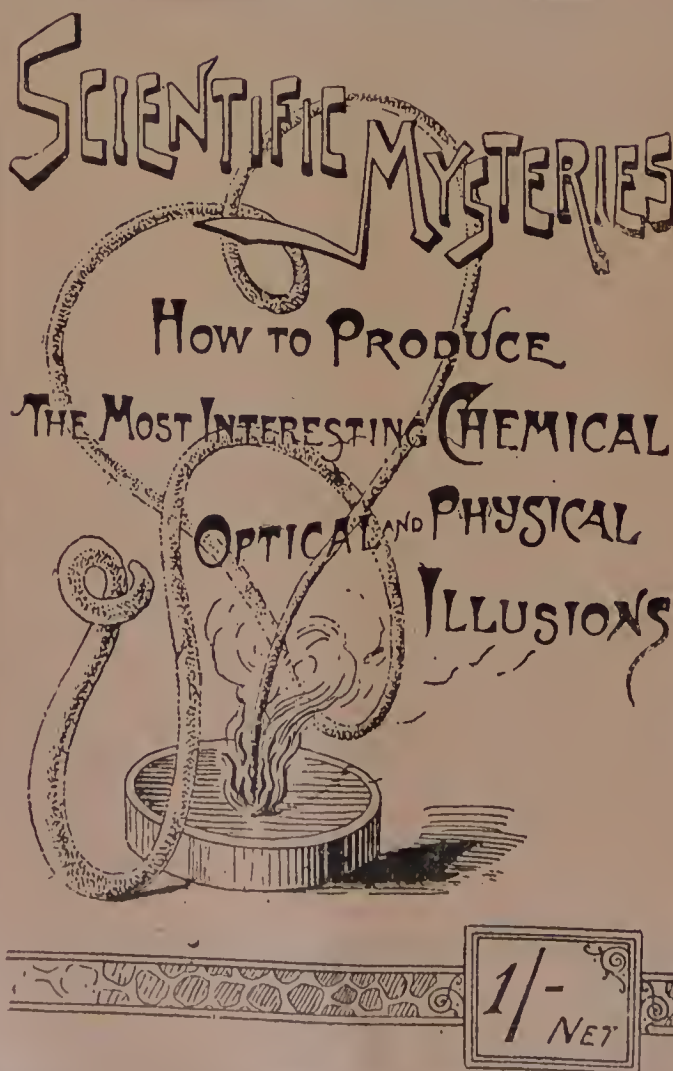
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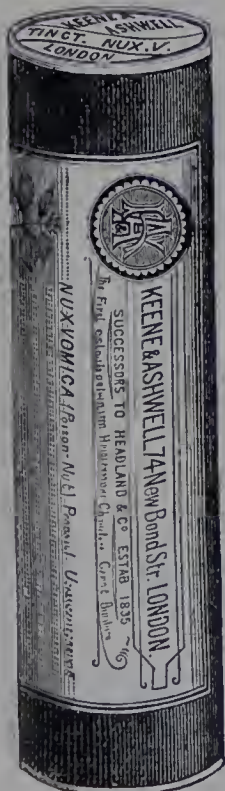
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